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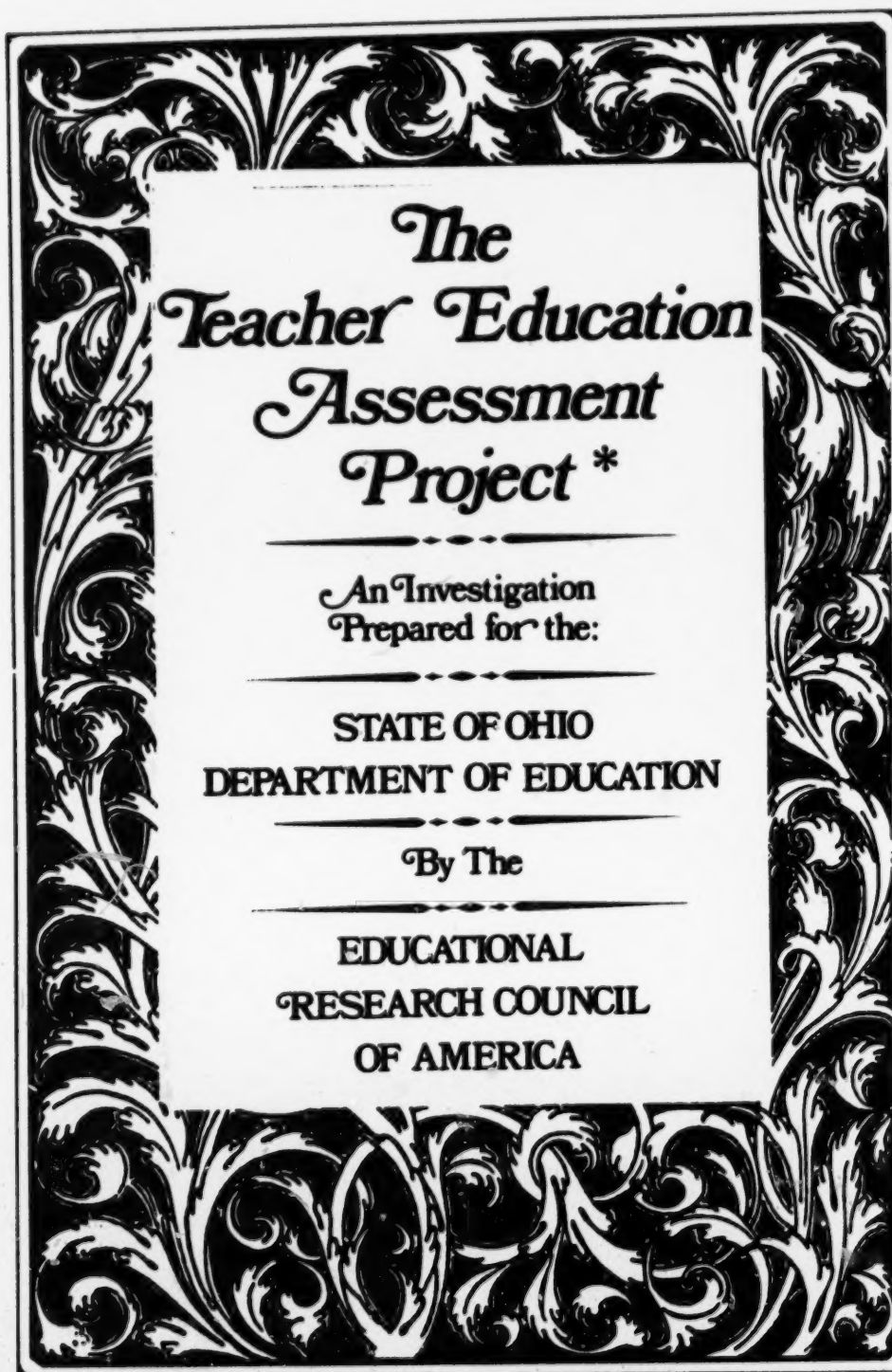
ABSTRACT

This document describes a project designed to (1) determine the status of teacher education in Ohio, (2) identify more desirable approaches and structures for providing such education, and (3) propose alternative means for achieving it. Ohio preservice education, continuing education, and differentiated staffing schema were surveyed, and the results were used to identify potential improvements and to suggest models for such improvement. This survey included (1) review of the research and literature; (2) review of preservice education in eight Ohio institutions; (3) analysis of responses from 298 professors, teachers, principals, and students to a teacher education instrument; (4) discussions with consultants; (5) visitations; (6) review of continuing education and differentiated staffing programs; and (7) analysis of six model elementary teacher education proposals as submitted to the USOE. A bibliography of related sources is appended. (Author/LLR)

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**or how to get a credential as an insurance policy to be used only in
periods of marital or economic adversity.*

*— Arthur Corey in
The Teacher Dropout*

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ABSTRACT

Ohio preservice education, continuing education, and differentiated staffing schema were surveyed to learn how secondary teachers are being educated and how they are organized for instruction. The results of this survey were used to identify potential improvements for such education and organization and to propose ways to achieve them.

This survey included (1) review of the research and literature, (2) review of preservice education in 8 Ohio institutions, (3) analysis of responses from 298 professors, teachers, principals, and students to a 17-parameter teacher education instrument, (4) discussions with consultants, (5) visitations, (6) review of continuing education programs in Ohio and of differentiated staffing schema, and (7) analysis of 6 model elementary teacher education proposals as submitted to the USOE.

The preservice programs included about 120 semester hours of liberal arts, academic content, and professional education. The liberal arts phase constituted about half the Bachelor's degree programs in each institution and included humanities, mathematics, natural and social sciences, foreign language, English, and physical education. The academic content phase covered nearly one-third the programs and included either one comprehensive area or two related fields. Less than one-fifth the programs were devoted to professional education, and included student teaching, educational psychology, and cultural foundations and pedagogical theory. Church-supported schools required theology or religion.

Continuing education mostly depended on Federal ESEA or EPDA funds. Locally financed programs were rare; and, when provided, were often viewed by participants as more of an imposition than as a professional commitment.

Existing differentiated staffing arrangements generally provided for experimental team teaching involving volunteers or paid auxiliary personnel, such as teacher aides. These programs emphasized teacher recognition through a vertically organized hierarchy. Salary differentials were given for differences in responsibility.

A preservice model to prepare trainees for any of five differentiated staffing positions was suggested. The model emphasizes the need for more individualized and humanistic secondary school programs. It is proposed that teachers be trained according to their personal need-dispositions and their attitudes toward children, learning, and knowledge. The suggested programs are characterized by practical work experiences with preparatory and follow-up study. Each experience requires cooperation between schools, colleges, and community, state, and professional agencies.

A differentiated staffing model was suggested. The model describes a system providing teacher recognition according to professional role differences as learning specialists, subject matter specialists, educational specialists, instructional communications specialists, or learning technicians.

A continuing education model was suggested. The model describes how school personnel can work together to identify common local needs. It is proposed that programs to satisfy these needs be developed locally with help from a regional agency and submitted to a state-wide committee for approval. Once approved, the State Department of Education could help support the program on a matching basis with funds provided through a system of state taxation or through reallocated Federal monies.

ACKNOWLEDGMENTS

The Teacher Education Assessment Project was conducted by the Educational Research Council of America for the State of Ohio Department of Education.

The purposes of the Project were (1) to determine the present status of teacher education in Ohio, (2) to identify more desirable approaches and structures for providing such education, and (3) to propose alternative means for achieving it. Data for the project came from many sources. These included review of the recent literature and research, an analysis of current Ohio college bulletins and catalogs, reports and documents made available through the State of Ohio Department of Education, interviews and conferences with teachers, professors, students, and others concerned with the improvement of teacher education in Ohio, and an analysis of responses to an original instrument. Additional data were gathered from an Advisory Panel and from consultants. These data were used to develop guidelines, suggestions, recommendations, and tentative models.

The text of the report is concerned with the description of the project, its methodology, the findings and their interpretation, and some suggested alternatives in teacher education. Some suggestions for further research are included. It is hoped that persons concerned with the continued improvement of teacher education find this study helpful.

Two central considerations were necessary for the discussions and suggestions contained in this report. First, that the task involved was regarded to be of such scope and complexity as to extend beyond the capabilities of a single institution; second, that the backgrounds of knowledge and experience of many consultants were paramount.

This project would not have been possible without the cooperation and assistance of many persons. Thanks are extended to the hundreds of teachers, administrators, college professors, and students who have contributed to it. Appreciation is also given to the college and public school officials throughout Ohio who have encouraged this research by permitting their students and staffs to participate.

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**THE
TEACHER
EDUCATION
ASSESSMENT
PROJECT**

The research reported herein was performed pursuant to a contract with the State of Ohio Department of Education through funds made available by the Office of Education, U.S. Department of Health, Education, and Welfare. Contractors undertaking such projects under Government sponsorship are encouraged to express freely their professional judgment in the conduct of the project. Points of view or opinions stated do not, therefore, necessarily represent official State of Ohio Department of Education, or U.S. Office of Education position or policy.

**Alden H. Blankenship
Project Director**

CHAPTER I

OVERVIEW OF THE TEACHER EDUCATION ASSESSMENT PROJECT

"...education, as currently constituted, is the greatest enemy of poor youth. . .we have created a monster which, rather than helping young people, actually engages in systematic destruction of persons in public school education.

—Arthur Pearl, at the Fifth General Session of the Annual Meeting of the American Association of Colleges of Teacher Education, 1967.

Introduction

On March 24, 1969, the Educational Research Council of America signed a contract with the Ohio State Department of Education to "conduct an assessment of the status of teacher education in Ohio." The purpose of the assessment was to provide a base of data upon which alternative solutions may be proposed for overcoming certain staffing needs which may exist in Ohio. The present study, referred to as the Teacher Education Assessment Project (TEAP), came about as a result of two beliefs currently held about American schools. The first belief was that American teacher preparation programs are inadequate. The second was that the professional staffing of American schools is poorly structured.¹

This double-loaded problem in America's schools may have come about for any number of reasons. The biggest reason still exists. It is because current teacher education practices—the way teachers are prepared, the way

¹Cf.: Martin Essex, The Ohio State Plan for Research in Teacher Education, Columbus, Ohio: State of Ohio Department of Education, mimeographed August 1968; and Martin Essex, "Modern Frontiers of Teaching," The 1966-67 Jennings Scholar Lectures (Cleveland, Ohio: Educational Research Council of Greater Cleveland, 1966).

their skills are maintained, and how their skills are used—may no longer be appropriate for accomplishing the role of the school.

The purposes of the TEAP were: (1) to find out the status of secondary teacher education in Ohio, (2) to identify improved approaches and structures for providing such education, and (3) to propose alternative means for achieving it.

The major objective of the TEAP was to suggest alternative programs in teacher education that can correct the situation in Ohio. Some of these alternatives may be useful in other states.

Planning and restructuring teacher education in Ohio was seen to require three basic steps. The first involved a survey assessment of how teachers are prepared, how they maintain and improve their skills, and how they are organized to articulate instruction. This required a careful determination and description of the current position and status of teacher education in Ohio. Such a statement of existing conditions was prerequisite to the second step: to contrast present day programs with desired structures and approaches in order to identify discrepancies between "what is" as opposed to "what ought to be." These differences were considered as needs existing within the state educational system and provided a foundation for the third step, which was a derivation of recommended alternative solutions for satisfying those needs.

The concept of teacher education was divided into three major areas:

1. Preservice Education consists of those planned learning experiences and activities necessary for an individual to be qualified and certified to teach in the public schools in the State of Ohio.
2. Continuing Teacher Education consists of those planned learning experiences necessary for teachers to maintain and/or improve their professional abilities.
3. Differentiated Staffing and Staff Utilization is defined as any planned deployment of school staffs intended to improve simultaneously the learning opportunities for children, the professional growth opportunities for teachers, and the personal and psychological needs of both. Differentiated staffing

refers to the use of experienced teachers, beginning teachers, interns, and paraprofessionals such as clerical, instructional, and general assistants in the schools. Staff utilization has to do with how school staffs may be organized to make most efficient use of their skills and knowledges. Both phrases suggest methods or patterns of school organization designed to maximize the learning opportunities for children. For ease in presentation, and since both terms refer essentially to the same outcome, they have been combined into the single phrase, differentiated staffing.

Objectives

The Need for Assessment In the Area of Preservice Teacher Education

At present, teachers are required to prepare themselves in many different areas. They are called upon to develop knowledge of subject matter, of learning processes, and of human behavior. They need to master new developments in instructional materials, procedures and many other advances in research and technology. They have to be equipped to teach the children of the rich and the poor, whether they be from the rural districts, suburbia, or the urban ghetto. They need to be prepared to conduct conferences with parents and other members of the community and still be able to assume roles as clerk, typist, and record keeper. They need to know how to act as parent, guide, and bill collector.

It no longer seems reasonable to assume that this multiplicity of tasks can be the responsibility of one person. For maximum teacher effectiveness it appears that these tasks need to be distributed among individuals who have specified skills and responsibilities. This report will deal with this problem by reviewing how teachers are being prepared in Ohio.

The objectives of the review of preservice education were:

1. to establish new and more appropriate roles for instructional personnel involved in the teaching-learning system

2. to determine procedures for preparing people for these roles
3. to assess ways and means of assisting teachers in synthesizing subject matter, theory, and practice
4. to suggest ways to up-date preservice teacher education on a continuing basis.

The Need for Assessment In the Area of Continuing Teacher Education

New curricula and new and innovative methods for implementing them are evolving rapidly. Some, like the fabled Phoenix, are reconstituted from bits and pieces of earlier efforts. Some have been very effective in meeting the curriculum needs of the schools. Others have been inadequate "cut and paste" attempts, and curricula developed in that way may not always require many changes in teacher behavior. They do require an orientation or some familiarity with their characteristics if they are to succeed at all.

Other curricula, especially those based upon specific learning needs of children, often require significant changes in teacher behavior, including their attitudes, value systems, beliefs, and skills. These programs, however, tend to be met with resistance. Somehow, despite many national, state, and local efforts, teacher behavior has tended to remain unchanged. Some teachers ask for new aids, techniques, and other things they can do to improve the use of their present skills. Some others feel that many of their present skills are inappropriate for providing the kinds of learning activities which children need most. Professional instructional personnel have identified some skills which must be developed if teachers are to be adequately prepared to (1) assess student learning needs and identify ways to satisfy those needs, (2) develop instructional goals stated in behavioral terms, (3) guide students through learning units at a pace commensurate with students' abilities, and (4) assess students' achievement in terms of stated behavioral objectives. Teachers are also faced with the exponential increases in knowledge and technology.

New structures in continuing education may be necessary to help inservice teachers achieve these skills. Ways must be continually sought to assist teachers in keeping up with new ideas and opinions as well as knowledge and technology. This aspect of teacher education is vital if instructional personnel are to reevaluate existing goals and attitudes in the light of research

findings. It is essential if school administrators are to provide the resources and facilities necessary to permit teachers to integrate subject matter knowledge with theories of learning successfully into educational practices and experiences. Suggestions for providing and organizing programs in continuing teacher education are offered in later portions of the present report.

The objectives of the continuing teacher education research were:

1. to determine structures of continuing teacher education programs which could maximize potentials for active improvement in small-group and individual learning situations
2. to determine procedures or systems for integrating subject matter with appropriate theories of learning to improve the learning activities of children
3. to identify and describe ways for increasing cooperation among teacher training institutions, schools, the State Department of Education, research agencies such as research and development centers, regional education laboratories, curriculum development agencies, and professional associations and organizations such as the Ohio Education Association, and the Ohio Council for Teacher Education.
4. to identify and describe ways in which the best attributes of teachers—their experience, education, cultural background, and teaching responsibilities—may be used for the maximum benefit of the children and each other
5. to identify and describe mechanisms for evaluating continuing teacher education programs.

The Need for Assessment In the Area of Differentiated Staffing

Demands on teachers have become overwhelming. Many school districts have recognized this problem and have employed auxiliary teacher aides and

clerks. These people are trained to work with teachers and students to meet many of the demands. Recently, Federal funds, such as those made available through the Educational Professions Development Act of 1967, have been available to support the training and use of technical aides in the classroom.

Much of the available literature on the subject is descriptive or prescriptive, rather than research oriented. The newness of the concept and the lack of opportunity for extensive experiences in the use of these technical aides may have been responsible for circumstances of ineffectual or inappropriate use of them. Teacher aides, sometimes called paraprofessionals, or auxiliary educational personnel, often do not know their responsibilities. Teachers occasionally lack confidence in them. Sometimes aides do not understand how to work or associate with administrators and other instructional staffs. It appears that a great need exists for assistance with technical, clerical and other routine activities within the classroom. Adequate understandings of role definitions and role expectations are necessary if the student-aide-teacher relationship is to be effective. Consideration should be given to restructuring the teaching staff so that the variety of tasks associated with learning may be shared or differentiated among them. Suggestions for restructuring teaching staffs are offered in later sections of the present report.

The objectives of differentiated staffing research were:

1. to investigate and delineate the concept of the instructional team
2. to examine and suggest redefined roles for members of the educational staff
3. to determine the desired characteristics and qualifications for instructional team members and identify methods for training them
4. to identify and describe mechanisms for evaluating differentiated staffing structures

Overview of How the Project Was Conducted

The Teacher Education Assessment Project was conducted in five phases:

- I. Acquisition of project staff, advisors, and consultants
- II. Project organization and orientation and the accumulation of research documents and literature
- III. Extensive search of the documentation, identification of the sample, development of the instrumentation, and the data analysis procedures
- IV. Administration of the instrument, scoring, data analysis, and interpretation
- V. Attempts to develop possible solutions with accompanying rationales and philosophies for alternatives in teacher education, including the development of suggested teacher education models as well as methods of evaluating them, and identification of areas requiring additional study and research.

Phases I through IV were accomplished in six steps:

1. A seventeen-member Advisory Panel was established to provide inputs and give overall guidance to the project. The names of the persons on this panel are listed in the Acknowledgment of this report.
2. Four consultants were selected to help evaluate the project, provide data, and add guidance. Their names are listed in the Preface of this report.
3. Recent literature and research in each area were reviewed.
4. An instrument designed to determine the nature

of existing and desired teacher education practices in each area was developed from the literature and current thinking.

5. A sample was selected.
6. The instrument was administered and the responses were analyzed. Electronic data processing facilities of the Educational Research Council were used in conducting portions of this analysis.

The research for the TEAP was designed to cover both elementary and secondary education. Because of the recent research in elementary teacher education conducted through the U.S. Office of Education and supply and demand data regarding overages of teachers, the data for the present study were collected primarily at the secondary level.

The Literature and Research

A review of the literature and research was conducted. The purposes of this review were (1) to identify some of the major current trends, issues, and problems facing preservice education, continuing education, and differentiated staffing, (2) to develop a broad base from which a survey instrument may be derived, and (3) to provide the information necessary for describing present practices in teacher education.

The review of the literature and research involved documents from many sources. These included books, periodicals, and journals, ERIC Clearinghouse materials, public documents and records made available by the State Department of Education and the U.S. Office of Education, and reports from Research and Development Centers and colleges and universities. These materials were analyzed, abstracted, and categorized into seventeen parameters of teacher education. These parameters constituted a framework for additional data collection and for the development of a survey instrument. The literature and research were used extensively in the creation of suggestions for new alternatives to strengthen preservice education, continuing education, and differentiated staffing.

The Instrument

The data gathering instrument had two parts. Part I, Institutional Survey Data, was designed to collect information from the colleges, including enrollment data, selection and retention procedures, and program requirements. Part II, the Teacher Education Assessment Survey (TEAS), consisted of 232 authoritative statements. Some were descriptive and others were prescriptive of practices in either preservice education, continuing education, or differentiated staffing. Seventeen parameters of teacher education were covered, including:

1. Purposes and Methods of Preservice Education
2. Responsibility and Accountability for Preservice Education
3. Liberal Arts Program
4. Recruitment, Selection, and Retention
5. Psychology and Human Development
6. Cultural Foundations
7. Professional Standards, Certification, Placement and Welfare
8. Planning and Developing Learning Activities
9. Organizing and Providing for Learning Activities
10. Evaluating and Improving Learning Activities
11. Laboratory Experiences
12. Student Teaching
13. Internships
14. Responsibility and Accountability for Continuing Education
15. Purposes and Methods of Continuing Education
16. Purposes and Methods of Differentiated Staffing
17. Responsibility and Accountability for Differentiated Staffing

Three parallel forms of the TEAS were developed. One for college professors, and a second for teachers and administrators, requested the respondent to indicate (1) which statements were descriptive or prescriptive of teacher education practices at his institution, and (2) his attitudes toward these statements or practices. A third form for students sought only attitudinal responses.

The Sample

Respondents to the TEAS were identified according to a stratified random sampling procedure. First, a selected sample of eight out of fifty-two, or

fifteen percent, of the accredited Ohio teacher preparation institutions was identified. Criteria for selection included size of enrollment, control (public or nonpublic), sex (separate or coeducational), and geographic location (urban or nonurban). With the help of these eight institutions, 273 usable responses were received from college professors, teachers, principals, high school students, and preservice college students.

Additional data sources included members of the Project Advisory Panel, the consultants, and several directors of the State Department of Education.

Why This Project is Important

The Teacher Education Assessment Project is important because it suggests ways to improve teacher education based on the above findings. It is also important because it attempts to synthesize data from the institutions, schools, the students, the State Department of Education, and the research and literature. Finally, it is important because it proposes new and alternative ways to provide better programs in preservice and continuing education and for improving patterns of differentiated staffing.

CHAPTER II

PERSPECTIVES ON TEACHER EDUCATION

A newspaper headline recently read, "Little Red Schoolhouse Dies When Good Road Built." One-room schools, with all subjects being taught to all grades at the same time, simply dissolve when better transportation permits specialized spaces and specialized teaching. At the extreme of speeded-up movement, however, specialism of space and subject disappears once more. With automation, it is not only jobs that disappear, and complex roles that reappear. Centuries of specialist stress in pedagogy and in the arrangement of data now end with the instantaneous retrieval of information made possible by electricity. Automation is information and it not only ends jobs in the world of learning, it ends subjects in the world of learning. It does not end the world of learning.

—Marshall McLuhan

Introduction

When Paul Woodring and John Scanlon of the Saturday Review asked four prominent college persons and three equally important critics, "How should teachers be educated?" they meant "How should teachers be prepared in college?"² But that was in 1960. Today, ten years later, Roy Edelfelt says that

...there needs to be some drastic revision in the

¹Marshall McLuhan, Understanding Media, (New York: New American Library, 1964), p. 300.

²Paul Woodring and John Scanlon, American Education Today (New York, McGraw-Hill, 1960), pp. 239-244.

concept of how teachers are prepared. Preservice and in-service teacher education will need to become unified instead of being separated as they are now.³

In the first instance, teacher education was more or less synonymous with preservice education. This view is still shared by several authorities such as Conant,⁴ Combs,⁵ and Hazard.⁶ Edelfelt's statement reflects a growing sentiment among others who see teacher education as embodying a continuum that begins with the freshman year in college and ends somewhere near retirement. Harris,⁷ Dickson,⁸ Moffitt,⁹ and Haskew¹⁰ are others who view teacher education as more closely associated with in-service education. Haskew, for example, said, "Clearly, the major burden of educating teachers is shifting

³Roy Edelfelt, "The Preparation of Teachers: Preservice and In-service," T.M. Stinnet, ed., The Teacher Dropout, (Itasca, Illinois: F.E. Peacock Publishers, 1970), p. 95.

⁴James B. Conant, The Education of American Teachers (New York: McGraw-Hill, 1963).

⁵Arthur W. Combs, The Professional Education of Teachers (Boston: Allyn and Bacon, 1965).

⁶William R. Hazard, The Tutorial and Clinical Program of Teacher Education (Evanston, Illinois: Northwestern University Press, 1967).

⁷Ben M. Harris, and Wailand Bessent, In-Service Education (Englewood Cliffs, New Jersey: Prentice-Hall, Inc., 1969).

⁸George Dickson, "Toledo," in National Commission on Teacher Education and Professional Standards, Remaking the World of the Career Teacher (Washington, D. C.: National Education Association, 1966), pp. 60-72.

⁹John C. Moffitt, In-Service Education for Teachers (Washington, D. C.: Center for Applied Research in Education, 1963).

¹⁰Lawrence D. Haskew, "What Lies Ahead," in Edgar L. Morphet and David L. Jesser, eds., Designing Education for the Future, No. 4: Cooperative Planning for Education in 1980 (New York: Citation Press, 1968), pp. 11-52.

to the post-entrance years, to what we used to call in-service education, but what is now more appropriately denominated as continuous preparation."¹¹

The Problem

The issue here is not whether teacher education is preservice or in-service. The problem is in the process of teacher education. As a process, teacher education involves the development and maintenance of a body of professionally certificated and qualified persons who can facilitate meaningful learning experiences for children. Unfortunately, many of the current processes of teacher education are no longer appropriate for either developing or maintaining teacher's skills necessary for providing the kinds of meaningful learning experiences which today's children need. This problem is compounded when the needs of tomorrow's children, especially the ones born during the first half of the 1970's, are considered.

A recent research proposal prepared for the State of Ohio Department of Education pointed out that concern in this area was wide-spread.¹² Part of the problem was recognized by Stone:

Herein lies the problem that has plagued the nation's schools more persistently than any other in the post-war era: despite great advances in both the quantity and quality of teaching personnel, there never have been enough well-qualified teachers to meet minimum needs, let alone desirable and necessary standards.¹³

Sarason felt the problem was more than lack of well-qualified personnel:

...the contents and procedures of teacher education frequently have no demonstrable relevance to the

¹¹Ibid., p. 48.

¹²Martin Essex, The Ohio State Plan for Research in Teacher Education (Columbus, Ohio: State of Ohio Department of Education, mimeographed, August, 1968), pp. 1-7.

¹³James C. Stone, Breakthrough in Teacher Education (San Francisco: Jossey-Bass, Inc., 1968), p. 4.

actual teaching task.¹⁴

The recent Ohio State Plan for Research in Teacher Education¹⁵ revealed that most criticisms of teacher education focused on nine major areas:

1. The duplication of education course contents within the same program
2. The apparently meaningless distinction between proliferating grade level, subject matter courses
3. The obscure relationship between education course contents and teaching in the schools
4. The lack of agreement on a common body of knowledge needed for teachers in contrast with other professional preparation programs
5. The expressed lack of satisfying intellectual stimulation on the part of students who study education
6. The lag between educational research findings and technology and their incorporation into course contents
7. Absence of an interdisciplinary approach in education which would coordinate the findings and knowledges of other behavioral sciences
8. The continuing practice of placing too much reliance on the accumulation of course credits for certification rather than competent performance
9. The lack of relationship between continuing or in-service education and increased teacher effectiveness

¹⁴Seymour B. Sarason; Kenneth S. Davidson; and Buron Blatt, The Preparation of Teachers (N.Y.: John Wiley and Sons, Inc., 1962), p. vii.

¹⁵Essex, Research in Teacher Education, pp. 1-2.

What sequence or sequences of learning experiences do people need to become certificated and remain qualified to teach in the public schools? What should be included in those sequences for teacher education to continue to develop in a positive direction? Who should be responsible and accountable for what happens in that sequence? These questions guided most of the present study. So did this observation: America's increasing technology is changing the behavior of its society. Americans are now able to engage in activities that were once impossible, such as flying, watching television, or travelling in space. These activities have influenced how Americans spend their leisure time, what they do for a living, and to no small extent, what they believe is important and what is not—in effect, their value system. If this observation is correct, is it technology that is affecting priorities in American values, or is it the other way around? As new value systems emerge, how well does technology respond? How will the school respond to technology's response?

Solutions to the problem of teacher education and the questions related to it depend on certain major assumptions. For purposes of the present study it was assumed that:

1. The components of teacher education include knowledge, skills, attitudes and values, and certain behaviors.
2. Ohio public school teachers will continue to be required to be certificated by the State Department of Education.
3. Teacher education has an initial phase called preservice education which is defined as any planned sequence of undergraduate study conducted in a degree-granting institution of higher education that is specifically designed to certify and qualify people to become teachers.
4. Present Ohio teacher certification requirements will remain in effect in a broad sense; e.g., patterns of student teaching may change, but some period of supervised student teaching will continue to be required.
5. The purpose of preservice education is to prepare people with a body of scientific and humanistic knowledge and skills so they may help others,

especially children, and themselves, to change certain behaviors.

6. Preservice education is only the beginning of a professional teacher's development.
7. Teacher education has a secondary phase called in-service or continuing education which is defined as any planned sequence of learning experiences made available to instructional personnel.
8. The purpose of continuing education is to improve the learning opportunities of children through changing the behavior of instructional personnel.
9. The role of the teacher is changing and will continue to do so. An outgrowth of such change has been the recognition that preservice programs need to prepare teachers to assume new and changing roles.
10. The needs of secondary school children have changed and will continue to do so. Programs in preservice education need to be designed so they can change at least as fast as do the needs of children.
11. Teacher education is a process; that is, it is procedural, which implies some sequence of learning activities or some set of alternative sequences of learning which teachers need in order to function as facilitators of learning.

That "The Process" of teacher education has not yet been identified is not an assumption. If one must be made, it is that no one will ever identify "The Process" of teacher education. "The Process" cannot be sought after like some Kantian ideal existing somewhere "out there." The processes needed to achieve the future are only as stable as the needs and expectations of that future.

Conceptual Framework

Different people have different concepts of teacher education. To some, as mentioned earlier, it refers primarily to preservice programs. Others believe that teachers learn how to teach mostly through in-service or continuing education programs. These people claim that one really learns what teaching is about only after he gets into the classroom on a full-time basis.¹⁶ For purposes of this study, teacher education includes both preservice and continuing education. It also includes how teachers and other educational personnel work together to improve the learning opportunities for children.

The lack of agreement about what teacher education means is because few people seem to be certain about what teachers must know in order to teach, what skills and attitudes they should have, and what the teacher's role should include, both in and out of the classroom.

Some authorities see the secondary school teacher as mainly a scholar in a subject field or academic discipline. People in this group also agree that teachers generally need certain pedagogical skills and understandings of the principles of education. Attempts to identify these skills and principles often point to three basic areas: psychology, curriculum methods, and cultural foundations. Skill development in psychology may be accomplished by taking such courses as "Human Growth and Development," "Introduction to Educational Psychology," or "Principles of Adolescent Psychology." Skills and understandings in curriculum methods may be acquired through courses with titles like "Social Science Methods for the Urban High School," "BSCS Biology Methods (yellow)," and "The Secondary School Curriculum." Cultural foundations, the third area, has course offerings such as "Educational Philosophy," "Educational Sociology," and the "History of American Education."

Persons in this group of authorities place emphasis on the cognitive areas. They regard the "professional sequence" as playing a supportive role to the academic subject field, the area they consider to be the teacher's most important area of knowledge.

Conant's views on the need for substantial reform in the liberal arts preparation of teachers are well known. Taylor agrees on the importance of the liberal arts, but mainly as an accumulation of resources for the sake of improv-

¹⁶Dan C. Lortie, "Teacher Socialization: The Robinson Crusoe Model," in National Commission on Teacher Education, The Real World of the Beginning Teacher (Washington, D. C.: National Education Association, 1966), pp. 54-66.

ing the intellect:

I wish to present the view that teaching people to think is not merely a question of training their intellects through the study of organized bodies of fact. This may very well teach them not to think but to memorize and accept what they are given, since all the work has been done for them and there is really nothing left to think about. The main problem is to teach people not only to think but to think for themselves and to organize their own bodies of knowledge and experience. The intellect is not a separate faculty. It is an activity of the whole organism, an activity which begins...when an individual is impelled to think by the presence of questions which require answers for him. He begins thinking when he is involved in experiences which require him to place these in some kind of order...Until he becomes conscious of the world around him and wishes to understand it, he is not able to think creatively either about himself or about his world. His sensibility, his values, his attitudes are the key to his intellect.¹⁷

Bush, in a presentation made at the Nineteenth National TEPS Conference in 1965, suggested that the traditional four-year undergraduate program be extended to allow adequate preparation in the liberal arts.¹⁸ Bush also suggested that sufficient course work be required in the specialized subject matter field and that better coordination be provided between the theoretical and practical laboratory work in professional education. He indicates that poor staffing patterns and inadequate preservice education are largely responsible for present school problems:

A serious shortcoming in schools is that teachers are often not adequately prepared to teach their assigned subjects. This is due partly, of course, to misassign-

¹⁷Harold Taylor, Art and the Intellect (New York: The Museum of Modern Art, 1960), pp. 12-13.

¹⁸Robert N. Bush, "The Formative Years," in National Commission on Teacher Education and Professional Standards, The Real World of the Beginning Teacher (Washington, D. C.: National Education Association, 1966), p. 4.

ment...A more serious problem, in my opinion, lies in faulty initial preparation. Teachers in training often do not receive an appropriate grounding in the subjects they are preparing to teach. Again, the fault lies not with the few much-abused required education courses. The real trouble is the lack of congruence between the typical college majors and the subjects that are to be taught in the schools. The college major has been planned...primarily to prepare for graduate study in the subject. The criteria for a college major do not necessarily constitute adequate breadth and depth for a person who is to teach the subject. While the standards for those preparing to teach a subject should not be lower than for those who major in the subject, the scope and sequence of the subject to be studied should be different.¹⁹

In the same volume, Lortie suggests that more demanding preparation programs may not be the most appropriate solution for improving preservice education:

...Since we cannot tell the short terms from the career teachers, let us provide minimum preparation for all and perhaps occasional courses for those who stay. The outcome is a system of induction into teaching where the beginner, so to speak, begins at the top. Few school systems have poured resources into staging either beginning or senior careers. Given the limited rewards that can result, one wonders whether more demanding preparation programs would have any great appeal to beginners.²⁰

Soon after the 1965 National TEPS Conference, Don Davies, Executive Secretary of the Commission, summarized his reactions to another set of TEPS Conferences on "Remaking the World of the Career Teacher." He noted three new opportunities for accomplishments formerly thought to be desirable, but out of reach: (1) to develop teacher education programs that "really make

¹⁹Ibid., p. 5.

²⁰Lortie, "The Robinson Crusoe Model." p. 63.

a difference," (2) to strengthen the voice of the profession, and (3) to "build a real profession of teaching."²¹ Davies saw eight ways to provide programs that "make a difference," that is, ways for programs to shift their emphasis from a subject and content program to a more humanistic, person-process approach:

1. More emphasis in research to provide improved instruction
2. Closer cooperation between schools and colleges
3. Closer consideration of what teachers regard as their learning needs instead of teacher educators independently deciding what teachers need
4. The development of a new breed of professional worker who will be able to function equally well in the school as in the college classroom (this is related to item 2. above)
5. The development of new programs for school administrators in order to help them make the school more responsive to community needs
6. Testing new ways to evaluate the effect of teacher behavior
7. A reemphasis on general or liberal arts preparation of teachers
8. A new orientation from white suburban, middle class to one that takes into account "the war on poverty, the civil rights movement, and other significant social forces."²²

²¹Don Davies, "An Era of Opportunity," Part Five in Roy Edelfelt, ed., Remaking the World of the Career Teacher (Washington, D. C. : National Commission on Teacher Education and Professional Standards, National Education Association, 1966), pp. 199-204.

²²Ibid., p. 201.

The Research and Policy Committee of the Committee for Economic Development agrees that the successful teacher must know his subject. They feel that changes in present staffing patterns, certification requirements and procedures, and salary schedules are necessary if the level of professional morale and status is to be raised. They suggest that schools of education provide pedagogical studies which are "effectively tied to educational purposes and goals, subject matter studies, and the improvement of school curricula and instructional technology."²³ The Committee has pointed out that:

Most teachers today know far too little about human motivation and behavior or the social and cultural forces which affect the individual. There is a desperate need for teachers to gain reliable knowledge relating to the special problems of the culturally and socially deprived. Schools of education should generate a greater concern for human values in a technological, industrial, and urban age, and prepare teachers to contend more effectively with the practical problems that arise in the daily experience of their pupils. The irrelevance of much education is one of the most serious failures in the schools.²⁴

Edelfelt visualized a different kind of specialization for teachers and teaching:

If the job of the teacher has become highly complex, has become more than a single teacher should be expected to do, what can we learn about how to remake the world of the career teacher by looking at other professions?

...Even though we recognize the need for more time and the need for consultant help in subject matter, we find it difficult to rid ourselves of a devotion to the isolated self-contained classroom

²³Research and Policy Committee, Innovation in Education: New Directions for the American School (New York: Committee for Economic Development, 1968), p. 51.

²⁴Ibid., pp. 51-52.

where the teacher is the sole ruler. We find it uncomfortable to share the private art of teaching with others. Do teachers really need the ego satisfaction of being a solo performer in the classroom?²⁵

Edelfelt suggests that as the role of the teacher becomes more complex, so must his preservice program to prepare him to function adequately in each facet of that role. The new breed of teacher may also have to learn to utilize and depend on the talents and skills of other professionals in education in order to provide children with meaningful learning activities. This could be necessary when teachers can no longer be expected to master every aspect of this emerging complex role. Essex announced in 1966 that the modern frontiers of teaching were such that a revolution was in the making:

The tools of revolution are at hand. Never have teachers had more spectacular resources from which to work. Available are mechanical devices, from self-tutoring machines to tachistoscopes. Included also are electronic devices, from language laboratories to computerized listening centers. Newer types of printed materials are readily at hand from full-color charts to programmed textbooks. The visual aids go from overhead projectors to television sets. The information sources extend from electronic data processing to microfiche cards.²⁶

Essex indicated that teachers needed more time to teach, a more manageable load, more specialized skills, to be scholars in their disciplines, and to have more and easier access to teaching materials. In consideration of these new developments in technology and learning, he proposed an Executive Teacher plan. His plan called for a differentiated instructional team of seven persons: an Executive or Master teacher, a professional teacher, two provisional teachers, an intern, an aide-technician, and a clerical aide. The team was to be

²⁵Roy Edelfelt, "Part One, The World of the Career Teacher," in Edelfelt, ed., Career Teacher, p. 4.

²⁶Martin Essex, "Modern Frontiers of Teaching," The 1966-67 Jennings Scholar Lectures (Cleveland, Ohio: Educational Research Council of Greater Cleveland, 1966), p. 19.

organized according to a hierarchy of instructional skills and responsibilities. Essex saw the major advantages of this plan as (1) providing appropriate compensation for different responsibilities and status, (2) providing recognition and reward, (3) adding dignity and prestige to the teaching profession, and (4) augmenting the manpower supply. Other advantages included stability of career choice, superior teacher availability to children, recognition of individuality, and improved opportunities for teachers to identify with an appropriate instructional role.

While most authorities seem to agree that teachers need to be scholars in their disciplines and that they need a firm footing in the liberal arts, their role expectations for teachers do not always reflect explicit need for the scholarly background prescribed or suggested. Essex, for example, described the role of the Executive or Master teacher to be:

- To organize and direct the total team effort
- To assume responsibility for long-range planning of instructional units and curriculum goals
- To measure the dimensions of individual needs of pupils through an understanding of testing, diagnostic and guidance processes
- To prepare visual and lecture materials
- To schedule and organize equipment
- To consult with parents and deal with home problems associated with school progress
- To direct the work of specialists in the diagnosis of learning problems, both for remediation and for attaining maximum achievement from the average and bright
- To plan and schedule special services including health, speech therapy, and psychological services
- To associate with research, both as a participant and a consumer of research findings from elsewhere²⁷

²⁷Ibid., p. 24.

All of these functions depend upon the Executive teacher mastering both an academic discipline plus the development of outstanding competencies in how to provide meaningful learning opportunities for children. Essex implies that that Master teacher is expert in process as well as content.

Swenson has pointed out that subject matter mastery is needed in order to make teachers feel secure in some field of study. This security is necessary for two reasons. First, they need it in order to be flexible enough to satisfy the individual needs of their learners. Second, because

The teacher's security in content to be taught is based on a complex of his knowledge and understanding of ideas in a given field of study, his competence in selecting and using sources in that field, his skill in identifying significant study techniques which are appropriate to the field, and his overall feeling that he knows how to be an effective guide to others. Teachers who do not have such abilities are apt to restrict their students' activities to their own knowledge.²⁸

Swenson suggests that teachers need to accumulate cognitive knowledge not for the purpose of transmitting it into the minds of children, but to help them to interact better with knowledge sources on a first-hand basis according to their individual needs and preferences. Here again is the implication that preservice education must prepare teachers as facilitators of learning rather than as conveyors of cognitive knowledge.

During the late 1950's Grambs identified two role categories for teachers. The first was as director of learning and included all those activities and concepts related to teaching as an activity or process.²⁹ The second category was as mediator of the culture and had to do with the social functions of teaching. The former role describes the teacher as one who judges achievement, keeps discipline, establishes a moral atmosphere, acts as conficant and guide,

²⁸ Esther Swenson, "Teacher Preparation," in Nelson B. Henry, ed., Individualizing Instruction (Chicago: The University of Chicago Press, the Sixty-First Yearbook of the National Society for the Study of Education, 1962), pp. 291-292.

²⁹ Jean D. Grambs, "The Roles of the Teacher," in Lindley Stiles, ed., The Teacher's Role in American Society (New York: Harper & Bros., 1957), pp. 73-93.

and gives advice and affection. Further, the teacher

...must have knowledge, and must know how to impart it to individuals of varying talent and interest. He has great power to promote or fail, to facilitate access to knowledge or to withhold it, to establish feelings of comradeship and acceptance, or competition and segregation based on race, intellect, finances, behavior. He is both weak and powerful in the elaborate hierarchy of the school.³⁰

Grambs describes the teacher's mediator of the culture role as that of community agent. The teacher is expected to be middle class, a model for the young, an idealist, and a "pioneer in the world of ideas—the teacher is a radical."³¹ The teacher is also expected to be "cultured," a participant in community activities, an objective public servant, and to have high aspirations. A subtle, yet powerful change in the mediator role concept was expressed by Robb:

...we [have] ignored the fact that teachers, to be successful, must be exciting people. We produced too many teachers of the placid kind that students forget, or wish they could forget, instead of the memorable facilitators of learning they never forget. The cardinal sin of teaching is, and always was, dullness.³² [Italics added.]

Thompson recently cited seven misconceptions which have contributed to

³⁰Ibid., p. 80

³¹Ibid., p. 82. Grambs adds, however, the "the public is seeking some means of controlling the teacher, of keeping him within the bounds of conservative middle-class concepts and policies."

³²Felix Robb, "The Ninth Charles W. Hunt Lecture: Teachers: The Need and the Task," in The American Association of Colleges for Teacher Education, Teacher Education Issues and Innovations: The Past in Prologue (Washington, D. C.: The Association, Twenty-First Yearbook, 1968 Annual Meeting, 1968), p. 22.

the failure of teacher education. They were the views that (1) beginning teachers must be prepared as capable artists, (2) the study of theory almost automatically improves practice, (3) the underlying theories of professional education are dependent upon the disciplines of psychology, sociology and philosophy, (4) anyone who knows how to teach can teach almost anything, (5) logic alone can be used to delineate the kinds of knowledges teachers need, (6) preservice education must last for four undergraduate years, and (7) competence can be defined in terms of courses and credits.³³ Of immediate interest is the statement Thompson makes regarding the misconception that anyone who knows how to teach can teach almost anything:

Through this belief we have been led to conclude that, if one understood pupils and how they learned, knowledge of what was to be learned was gratuitous. Since Sputnik—indeed, since Plato—we should have become aware the knowledge of what one teaches is as focal to the conduct of instruction as is knowledge of the learners and learning. As the mediator between the pupil and knowledge the teacher must understand both as thoroughly as possible.³⁴

Grambs has maintained a traditional point of view of what it is that teachers are supposed to be and do. Thompson says it would be a misconception to think otherwise. Robb has recently challenged these views; Whitehead began discarding them more than thirty-five years ago:

Our sociological theories, our political philosophy, our practical maxims of business, our political economy, and our doctrines of education are derived from an unbroken tradition of great thinkers and of practical examples from the age of Plato... to the end of the last century. The whole of this tradition is warped by the vicious assumption that each generation will substantially live amid the conditions governing the lives of its fathers and will transmit those conditions to mold with equal force the lives of its children. We are living in

³³Ralph H. Thompson, "Where Teacher Education Programs Fail," Journal of Teacher Education (Vol. 21, No. 2, Summer 1970), pp. 264-269.

³⁴Ibid., p. 266.

the first period of human history for which this assumption is false.³⁵

Both Whitehead and Robb are saying that the role of the teacher as mediator of the culture or as transmitter of the cultural heritage is no longer appropriate in modern America. The new role needs to be that of facilitator of learning.

AACTE has recently completed its TEAM project, described as "a sequence in preservice teacher education through the selective and planned use of new media."³⁶ This statement from their report is indicative of this new teacher-role perspective:

It is of particular importance to note that the matter of prime concern in relationship between objectives, learning processes, and educational materials and settings is overt behavior, not "knowledge." Knowledge is deemed to be valuable because it leads to behavior.

Behavioral objectives have become attractive because it is behavior we are supposed to modify through education. Thus, whenever we speak of knowledge as an aim of instruction, we should be aware that it is worth pursuing only to the extent that it is capable of giving rise to behaviors which are useful in life and which we are attempting to cultivate through education... The pursuit of knowledge is profitable only when the pursuit is conducted in a manner which enables the proffered content to penetrate the student's internal makeup and add to or change the mediating variables that control his behavior.³⁷

³⁵Alfred N. Whitehead, Adventures of Ideas (New York: MacMillan Company, 1933), p. 117.

³⁶American Association of Colleges for Teacher Education, Professional Teacher Education: A Programmed Design Developed by the AACTE Teacher Education and Media Project (Washington, D. C.: The Association, 1968), p. iii.

³⁷Ibid., pp. 19-20.

There seems to be a contradiction. From one side there is the call for improved academic preparation and the insistence that teachers must be specialists in their subject. This claim is supported by the reiteration of America's burgeoning technology, population, and knowledge. On the other side is the claim that teachers cannot be specialists in a subject and still keep up with new instructional developments such as independent study, taped tutorials, computer assisted instruction, instructional television, flexible scheduling, team teaching, continuous progress, and similar advances in learning modes. There is mounting evidence that the accumulation of academic "subject matter knowledge" should be a goal, but not be the goal of education for either teachers or children. The major goal of teacher education should be to make it possible for children to acquire the kinds of knowledge, skills, attitudes, and behaviors they need to continually live and learn in a continuously changing environment. Subject matter knowledge is necessary only to the extent that it makes the achievement of this goal possible.

Postman and Weingartner³⁸ believe that American educational systems have been geared towards developing youngsters who can answer questions quickly and accurately and, when necessary, substantiate their answers with evidence. They further believe that to train children to respond with "knowledge answers" is no longer as important as having children learn how to ask meaningful questions. For children to develop that skill they need to receive instruction according to the inquiry method. That is, student responses should consist primarily of question-asking, not question-answering as they claim is currently the practice. Man spends more of his life asking questions to make value judgments than answering questions.

Such a rationale is significant for contemporary America. It becomes more significant when considered in connection with the earlier observation that value systems are being affected by our technology. If more Americans were better able to ask vital questions in the public interest, perhaps some of the value systems problems now facing our nation would not keep us on the brink of crisis. This idea is at least as old as Plato's Republic. Tussman points out that a democratic society necessitates a deliberative populace and that adequate deliberation requires the ability to ask proper questions in the public interest.³⁹ A second goal of American teacher education, therefore,

³⁸Neil Postman and Charles Weingartner, Teaching as a Subversive Activity (New York: Delacorte Press, 1969).

³⁹Joseph Tussman, Obligation and the Body Politic (New York: Oxford University Press, 1960).

should be to make it possible for teachers to provide learning experiences for developing children's abilities to ask questions that are meaningful not only to themselves, but in the public interest as well.

Programs in teacher education should include learning experiences which could help teachers accomplish both these goals.

The intent here is not to isolate goals. It is to establish some conceptual guidelines for direction in teacher education. Learning occurs in the present and is directed to the future. People learn things now so they can have new patterns of behavior in order to function better in the future. If portions of the future can be determined, those portions need to be prepared for.

The Future in the Mirror

Søren Kierkegaard once remarked, "He who fights the future has a dangerous enemy. The future is not; it borrows its strength from the man himself and when it has tricked him out of this, then it appears outside him as an enemy he must meet." To what extent is this true? The future is really seen by looking at what we are doing and what the effects of our activities will be.

The future can be seen in three ways. With one eye it can be seen as an extension of today, like a regression curve projected into the future based on the past. It is in this context that statisticians compute projections of populations, deaths, marriages, and school enrollments.

The regression curve eye sees, for example,

- Computer assisted instruction as well as automated business and personnel management in schools.⁴⁰
- New and better "educational" and propaganda methods for affecting human behavior, public and private; perfected methods of direct electronic communication with stimulation of the brain; new ways to educate children; the improvement of learning and memory through chemotherapy;

⁴⁰T.J. Gordon and O. Helmer, Report on Long-Range Forecasting Study. (Santa Monica, California: The Rand Corporation, 1964).

electromechanical and chemical means for improving human thought processes more or less directly; easy to use and inexpensive videorecording and planning; extensive use of computers for information storage and retrieval, for translating languages, and for teaching; very low cost (under \$20) portable television receivers for individualized instruction; home education by way of educational television and computerized programmed learning; new techniques for teaching foreign languages rapidly.⁴¹

- By 1980 two-thirds of our metropolitan population will have attended college. The experienced professional will go back to school for advanced training every two or three years.⁴²
- Many new kinds of careers will be available and will offer opportunities in a meritocratic society.⁴³
- "What matters in education about the future is not the biological production of geniuses by what they have learned and are learning about every subject in the total human curriculum, but what they learn about how to trust, how to learn, and how to relate to others."⁴⁴
- A Gross National Product exceeding one trillion dollars before 1972.⁴⁵

⁴¹Daedalus, Journal of the American Academy of Arts and Sciences, (Summer, 1967).

⁴²Commission on the Year 2000, Working Papers, American Academy of Arts and Sciences, 1966.

⁴³Ibid.

⁴⁴New York Times Magazine, "Symposium on the Future," with contributions by H.S. Commager, H.L. Dryden, J.B.S. Haldane, Margaret Mead, Clarence Randall, and Arnold Toynbee (April 19, 1964) in "Curriculum Committee of the California Association of Secondary School Administrators, Subcommittee on Curriculum Objectives, 1970 for 2000," Education Now for Tomorrow's World (Burlingame, California: The Association, May, 1968), p. 34.

⁴⁵The President of the United States said so in a recent televised speech.

- An increased life span.
- "Education's three major concerns with knowledge in the next decade are likely to be projections of present quandaries. What knowledge has priority? How can transmission of knowledge be escalated? What can be done through formal education to establish behaviors and life postures which will equip individuals to deal with accruing knowledge?"⁴⁶
- The human memory span will be able to be increased or decreased, and, "...we will be able to increase initiative, confidence, and the capacity for learning through medication."⁴⁷
- Mining and farming in the ocean
- Conquered about every major disease except the common cold

Through the other eye can be seen what "ought to be." Out of the eye can be seen:

- Peace⁴⁸
- The wholehearted acceptance, by all those who care about the learning opportunities of children, of the responsibilities enumerated by the California Association of Secondary School Administrators, namely:
 1. To provide opportunities for understanding and appreciation of the need for individual flexibility in an atmosphere of change

⁴⁶Haskew, "What Lies Ahead," p. 22.

⁴⁷B. Frank Brown, "The Subordination of Teaching to Learning," in Laurence K. Levan, et. al., eds. Teacher Education: The Emerging Future (New York: Educational Records Bureau, 1967), p. 6.

⁴⁸Current separation of church and state interdicts adequate documentation on this point.

2. To develop in youth an attitude of inquiry; to teach the process of problem solving and decision making as distinguished from the storing of facts
3. To continue training in the basic tools of learning
4. To develop a curriculum where the criterion for priorities is based upon relevance to contemporary and future needs of youth
5. To prepare youth for a changing world of work
6. To prepare youth for responsible, participating citizenship
7. To provide preparation for productive use of leisure time
8. To extend and emphasize the teaching of the fine arts
9. To teach civilized human relations
10. To build bridges to an understanding of all the peoples of the world
11. To assist youth in developing moral and ethical guidelines
12. To prepare youth to understand and deal constructively with psychological tensions
13. To assist youth in developing ways of insuring individual privacy and worth in a world of increasing group activity and social supervision
14. To provide opportunities for study and understanding of urban life and problems

15. To develop an instructional program in school that fully utilizes information services and agencies outside of the classroom⁴⁹

The third view toward the future requires the perspective of both eyes. This perspective is a tempered outlook between the calculations of what probably will be and the picture of what ought to be. The third view is what could be.

In an attempt to learn what could be, Caffrey conducted a recent study to identify probable and desirable occurrences in the period 1968-1978. Members of the American Council on Education and its affiliates, along with faculty and student leaders, were asked to give their opinions and ratings of 35 hypothetical events, conditions, and developments. Several of these events dealt with education. After a proper warning of statistical bias, Caffrey reported that most of the 2,040 respondents foresaw the probable displacement of human instructors by television, computers, or other devices but the occurrence of that event was regarded as undesirable. A large majority of the sample thought that undergraduate curricula will and should undergo substantial revisions. It was also believed that tremendous instructional improvement will occur following breakthroughs in understanding the learning process. A question about the balance between required and elective courses did not provoke much difference of opinion. The idea of giving academic credit for nonacademic student experience provoked a mixed reaction. Most of those who regarded that practice as undesirable, as well as those who saw it as highly desirable, were optimistic that it would happen. A majority of the respondents regarded as highly likely, but equally undesirable, the idea that standards in higher education would be lowered in order to provide more educational opportunities for the disadvantaged.⁵⁰

Some of these things could happen either because they are desired or because current trends indicate they will. Some good ideas about education may become realities; but because of fear, scepticism, and distrust, they may

⁴⁹The California Subcommittee, Education Now for Tomorrow's World, pp. 63-73.

⁵⁰John Caffrey, "Predictions for Higher Education in the 1970's," in John Caffrey, ed., The Future Academic Community (Washington, D. C.: American Council on Education, 1969), pp. 261-292.

never materialize. Other ideas, because of hope, faith, and a sincere desire for success do attain fruition and the validity of the idea is tested. What educators want to happen could, as long as they do not become afraid of themselves and of each other.

VanTil provides an example of necessary perspective to view the future of teacher education.⁵¹ He sees first a potential break in the present system of teacher education. This break could be brought about by (1) persistent criticisms of the efficacy of teacher preparation programs, (2) slowness of teacher preparation institutions to adapt to technological changes, (3) general conservatism in teacher education, and (4) admission of weakness by teacher educators themselves. If such a break occurs, VanTil predicts at least four alternative consequences. The first could be the sharp reduction of professional education preparation, leaving the remains of the teacher education effort to the liberal arts professors. The second is that teacher unions and organizations take over the full responsibilities of preservice and continuing education. A third possibility would be the complete take-over by state departments of education. The fourth alternative could be in the form of teacher education take-over by the industry-government complex. VanTil suggests that if no such breaks occur, a system of teacher education will develop with the following characteristics:

1. Teaching machines in the form of computers, television receivers, and other technological media playing a major role in the training of teachers.
2. A six-year preservice program consisting of four years of liberal arts and discipline specialization, followed by two years of intensive professional education.
3. A professional education sequence based on a laboratory-observation format.
4. More opportunities for advanced study in education through expanded programs of in-service education. Bi-annual extended vacations, paid leaves of absence, and sabbaticals will serve to

⁵¹William VanTil, The Year 2000: Teacher Education (Terre Haute: Indiana State University, 1968).

encourage teachers to participate in such programs. "Such periods may also provide opportunities for the expanding number of paraprofessionals, assistant teachers, retreats from other occupations including housewifery, to be educated to become coordinating teachers."⁵²
[Italics added.]

Educating with a Differentiated Staff

The idea of using paraprofessionals and assistant teachers is not new. The Babylonian Talmud directs that when a school class exceeds an enrollment of twenty-five, an assistant teacher be appointed. This pattern was helpful to the teacher and assured a continuing source of new teachers. In the 1950's the idea of using more than one person in the classroom was rediscovered⁵³ and by the early 1960's experiments were begun to test its efficacy.⁵⁴ The concept, as described by Trump, caught on slowly. In a study begun in 1956 by the National Association of Secondary School Principals, Trump and Baynham described a professional staffing pattern designed to recognize and utilize more adequately the skills of instructional personnel.⁵⁵ Their plan called for the interrelation of three learning strategies—small-group instruction, large-group instruction, and independent study. This interrelation depended upon the use of teacher assistants and team teaching. The teaching staff was to consist of six specialists. Staff specialists were described as full-time certified persons who could serve the specialized instructional needs of several schools. Teachers could use these specialists as resources in such areas as guidance, research, special education, and reading. Community consultants could be

⁵²Ibid., p. 32.

⁵³J. Lloyd Trump and Dorsey Baynham, Focus on Change: Guide to Better Schools (Chicago: Rand McNally & Co., 1961).

⁵⁴Murray Glanzer, "Experimental Study of Team Training and Team Functioning," in Robert Glaser, ed., Training Research and Education (Pittsburgh: University of Pittsburgh Press, 1962), pp. 379-407.

⁵⁵Trump and Baynham, Focus on Change.

called upon by teachers to make special presentations or provide important supplementary information. General aides were to be available for routine and clerical chores which take up much of the teacher's day. These aides would be high school graduates and could help teachers for ten or twenty hours per week by supervising halls, cafeterias, or playgrounds and by assisting with some extraclass activities. Clerks would be responsible for typing, duplicating, record-keeping, and other clerical duties relating to class management. These persons would be high school graduates with a business education and be employed on a forty-hour per week basis. Tasks requiring more specialized skills than clerical duties but less than the professional level of teaching would be accomplished by instruction assistants. Reading and evaluating English themes, serving as laboratory assistants, and supervising out-of-school projects are examples of duties for these persons. Trump suggests that instruction assistants be college graduates and work for ten to twenty hours per week.

Anderson⁵⁶ did much to popularize the use of teacher aides; however, the growing use of the concept was only one indication of the authoritative recognition that specialized skills were needed if public education was to keep up with increasing school enrollments and the changing needs of learners. As the sixties progressed, more school districts experimented with variations on the theme. Some popular examples of differentiated staffing projects are those conducted at the Temple City Unified School District, Temple City, California,⁵⁷ the Alachua County Board of Public Instruction, Gainesville, Florida,⁵⁸ the Dayton City School District, Dayton, Ohio,⁵⁹ the Princeton City School

⁵⁶Robert H. Anderson, Teaching in a World of Change (New York: Harcourt, Brace and World, 1966).

⁵⁷Temple City Unified School District, New Careers in Teaching Differentiated Staffing (Temple City, California: Board of Education, 1969).

⁵⁸Alachua County Board of Public Instruction, "A Proposal to Develop and Implement an Exemplary Pilot Program for Training New Personnel to Serve in Differentiated Staff Roles" (Gainesville, Florida: The Board, November 27, 1968, mimeographed).

⁵⁹"Westwood Staffing Project," Differentiated Staffing, Westwood School, 1969-70 (Dayton, Ohio: Board of Education, 1970).

District, Evendale, Ohio⁶⁰ and the Kansas City Public Schools, Kansas City, Missouri.⁶¹ Additional details about parts of these projects are given in a later section of this report; however, certain of their characteristics are worth mentioning here.

Illustrative Differentiated Staffing Plans

The Temple City Plan began in the 1968-1969 school year. The purpose of the plan was described by Superintendent Jack Rand as a means for giving teachers a share in decision making and to allow teachers to aspire to top positions without going into administration.⁶² Initial operation of the plan involved one school of grades seven and eight and another school of grades three through six. The plan was based on a proposal developed by Dwight Allen. It currently calls for a five-level hierarchy as shown in Figure 1. At the top is a Master Teacher with a doctorate or equivalent who functions on a district level in the area of curriculum and research. Next is the Senior Teacher, the person responsible for the overall course content in his special subject area in a given school. He would have a Master's degree or equivalent and would act as the leader in a team teaching situation. The third level in the hierarchy is the Staff Teacher, the full-time member of the faculty whose level comprises the bulk of the school staff. Student or probationary teachers are subordinate to Staff Teachers and are referred to as Associate Teachers.

The fifth level in the scheme is made up of Auxiliary Support Personnel and includes three categories of instructional aides and clerks. These persons help teachers by supervising corridors and cafeterias and by assisting with nonteaching tasks. The program is implemented according to a flexible schedule

⁶⁰Descriptive material on this project can be obtained from Robert E. Lucas, Superintendent of Schools, 10428 Reading Road, Evendale, Cincinnati, Ohio, 45241.

⁶¹Donald Hair and Eugene Wolkey, "A Plan for Differentiated Staffing Public Schools in Kansas City, Missouri: A Case Study," (Kansas City, Mo.: Board of Education, 1968, mimeographed).

⁶²Jack Rand, quoted in "Differential Staffing in Schools," Education U.S.A. Special Report (Washington, D. C.: National School Public Relations Association, 1970), p. 10.

Figure 1 — Temple City Differentiated Staffing Plan

			NONTENURE
			Master Teacher Doctorate or Equivalent
			NONTENURE
			Senior Teacher M. S. or Equivalent
TENURE			
Staff Teacher B. A. Degree and Calif. Credential			
TENURE			
Associate Teacher A. B. or Intern			
100% Teaching	100% Teaching Responsibilities	3/5 Staff Teaching Responsibilities	2/5 Staff Teaching Responsibilities
1-10 Months	10 Months	10-11 Months	12 Months
ACADEMIC ASSISTANTS A. A. DEGREE OR EQUIVALENT			
EDUCATIONAL TECHNICIANS			
CLERKS			

and involves the instructional strategies as described earlier by Trump.⁶³ The plan is scheduled to start in the Temple City High School in September, 1970.

The Alachua Plan began operation in the 1969-1970 school year. Twenty-seven elementary teachers, twelve associate teachers, and twenty-four teacher aides were trained by nine experienced team leaders during the summer of 1969. These people were prepared to function as part of a differentiated staffing effort. The purpose of the plan was described by W. L. Kilpatrick, project director:

The potential teaching manpower exists in the area, but is presently excluded by traditional organization and certification standards. It is projected that planned programs of differentiated staffing... will attract and retain new personnel in elementary instruction. It is conceivable that a para-professional teaching aide or 'second-career' person might move upward in the [hierarchy].⁶⁴

At the bottom of the plan is the Teacher Aide, a trained junior-college level team member. His duties include clerical work, noninstructional supervision and general nonteaching activities. The second level is the Associate Teacher, a teacher-in-training. His duties consist mainly of providing classroom instructional activities as a team member. The Intern is on the same hierarchical level as the Associate Teacher. He works on the teaching team and concentrates on evaluation and his own professional improvement. The next higher level is the Staff Teacher. This position includes full-time teaching responsibilities as a member of the teaching team. The Staff Teacher concentrates on individualizing instruction and experimenting with new learning materials in large and small group settings. The Team Leader, an experienced, successful teacher fills the fourth level of responsibility. In addition to regular teaching, he coordinates overall planning and instruction for the team, is responsible for curriculum scope and sequence and gives direction for all other instruction-related problems and continuing education activities. A Master's degree and a successful record of experience could qualify an individual for the fifth level, the Curriculum Coordinator. This person works with

⁶³Trump and Baynham, Focus on Change, pp. 24-32.

⁶⁴Alachua County, "Differentiated Staff Roles," p. 3.

the principal and other team leaders to improve curriculum instruction, and research. The Principal serves at the top of the hierarchy and is responsible for providing continuous leadership throughout the school.

The Dayton Executive Teacher plan is being conducted at the Westwood Elementary School to provide a more individualized program through team teaching. Wayne Carle, Superintendent of the Dayton Schools, says the project is being used as a forerunner to Essex's Executive Teacher Plan.⁶⁵ The plan involves teaching teams consisting of one Master Teacher, or lead teacher, three to six Regular Teachers, a Teacher Intern, a Team Aide, and a Clerical Aide. The Master Teacher is the leader of his team and coordinates the activities of all team members. The duties of the other team personnel are similar to those already mentioned with related titles.

Dayton also tried an experimental differentiated staffing plan at the high school level.⁶⁶ The plan was conducted during the summer, 1969. Its main objective was to improve student achievement in science and mathematics through extended use of individualized instruction. Sixteen teachers, four student teachers, and seven interns were organized into teams. These teams varied in size depending upon the number of students involved. The personnel were trained by three university consultants and were paid modest sums of money from Aid for Dependent Children funds.

By the end of the summer, 425 high school students had completed course work in algebra, general mathematics, general science, biology, chemistry, and earth science. After the program was completed, all participants answered an evaluative questionnaire. Strahler, supervisor of the experiment, reported that the teachers were satisfied and that students were able to complete many more laboratory exercises and investigations. Another outcome of this differentiated staffing experiment could have significance for preservice education:

The university consultants agreed that the success of this program showed great possibilities for substituting for traditional student teaching. A much more meaningful neointernship as preteaching experience.⁶⁷

⁶⁵Essex, "Modern Frontiers of Teaching."

⁶⁶Violet Strahler, "High School Experimental Differentiated Staffing Plan: Summer, 1969," (Dayton, Ohio: Dayton Public Schools, Department of Instruction, mimeographed, November, 1970).

⁶⁷Ibid., p. 2.

The major drawback of the plan was cited by the teachers and interis. They said that the program demanded more planning time than was available.

The Princeton City Plan is a unique combination of merit pay with differentiated staffing. The purpose of the plan was described by Robert Lucas, Superintendent:

...it is the firm belief of the Princeton Board of Education and the administration that the staff member who puts forth the most effort and achieves outstanding results in the classroom must be compensated accordingly. Therefore, we have had a merit feature in our salary program for many years, and it has had the endorsement of nearly all of our staff. The differentiated staffing classification system, added in 1968, makes possible a more objective approach which we feel has been an improvement.⁶⁸

This plan provides for a Provisional Teacher on a basic salary schedule. An Associate receives base salary plus \$200, and a Professional, base plus \$550. An Executive teacher is employed for a 190-day school year and is paid \$800 above the base salary, and, if employed for an extended period of service, he is paid \$800 plus 10 percent above base. The district's description of its salary plan points out that

A team approach is used in the appraisal of teaching effectiveness. The principal is the appraiser, but he is guided by information from teaching team leaders or subject coordinators and the supervisor serving as advisors on the appraisal team. The Superintendent reviews the appraisals with the appraisal team and makes recommendations to the Board of Education for official consideration and action.⁶⁹

Differentiated staffing in Kansas City was viewed as a promising solution to several educational problems of the city: low reading achievement, below grade arithmetic skills, high teacher turnover, and lack of adequate staff.

⁶⁸Robert Lucas, personal letter, July 10, 1969.

⁶⁹Princeton City Schools, Princeton's Unique Professional Salary Plan (Cincinnati, Ohio: Board of Education, March, 1969), pp. 12-13.

The project began in September, 1969, in an elementary school and in a junior high school. Teaching teams were set up to provide programs to include team teaching, flexible scheduling, nongrading (at the elementary school), and independent study. Except for a conventional administrative structure, the team hierarchy consists of seven strata. At the top is a Coordinating Instructor who teaches some demonstration classes and has a small regular teaching assignment. His major responsibility is general supervision of the instructional program and he is directly responsible to the principal. Subordinate to the Coordinating Instructor is the Senior Instructor. This person serves as team leader, is a full-time teacher, and is generally responsible for the work of his team. Other members of the team include a regular Instructor who is a full-time teacher, an Associate Instructor who is typically a former teacher working on a part-time basis, an unsalaried Student Teacher, a full-time salaried Intern who works with a college advisor, and a full- or part-time Teacher Aide who helps with certain clerical and supervisory duties.

These five examples were selected because they illustrate some of the purposes for which differentiated staffing has been made operational. According to the Association of Classroom Teachers of the National Education Association, differentiated staffing has at least the following advantages:

1. It can provide a more meaningful and responsive educational program for children
2. It fosters the development of good teaching techniques such as individualizing instruction and working within the framework of a flexible or modular schedule
3. It allows more effective use of human resources by recognizing their individual skills and capabilities, by compensating them appropriately for using those skills effectively, and by providing them with opportunities for professional development
4. It provides increased opportunities for intrastaff and student-staff interaction ⁷⁰

⁷⁰ National Education Association, Classroom Teachers Speak on Differentiated Teaching Assignments (Washington, D. C.: The Association of Classroom Teachers, National Education Association, 1969), pp. 15-16.

It also has the following disadvantages:

1. It is frequently done too quickly. "Differentiated staffing cannot succeed if the roles of administrators do not change as the roles of the classroom teachers change"⁷¹
2. There is not enough money for adequate planning, implementing, or maintaining it
3. Neither teachers nor administrators are prepared to function adequately in the new framework of differentiated staffing
4. There are too many unanswered questions and too much bias among the proponents. This has resulted in:

Exaggerated and premature conclusions before projects are completed.

A lack of proof that giving teachers more ways to make more money actually improves what happens in the classroom.

Non sequitur reasoning. Authors claim that teachers will receive more money based on changes in responsibilities and say again later that teachers will receive more money based on evaluation of their competence. Classroom teachers resist merit rating.

Some authors imply that the teacher is most important in the school yet describe a salary schedule which pays money in inverse proportion to the time spent with children. This makes teachers suspicious.

⁷¹Ibid., p. 16

Inadequate role definitions are provided for administrators.

A feeling of "do as I say, not as I do," has been created because so many of the articles on the subject are written by college professors who do not practice what they preach. This creates a "credibility gap."

5. There is not enough "room at the top" since not everyone can be a team leader. This would mean lower, not higher salaries for teachers.
6. Inadequate public relations makes the staff and community more suspect.⁷²

Robert Bhaerman, the Director of Research for the American Federation of Teachers, cited four advantages and three disadvantages to the differential staffing concept.⁷³ On the positive side, he noted that it provides (1) a setting in which personnel can complement each other, (2) on-the-job training, (3) a wide variety of career patterns (not ladders), and (4) a range of ways to utilize school and community talent. On the negative side, Bhaerman charges that differentiated staffing (1) "...was created to serve not student needs but administrator convenience," (2) "...embodies the philosophy and weaknesses of merit pay.... Teachers will be forced into the position where the most effective bootlicker will be promoted. Political skullduggery by teachers will be rewarded to the detriment of children. Once again, the teacher who wishes to spend all his time working with children will be underpaid," and (3) "...does not reward all qualified teachers who seek advancement."⁷⁴

⁷²Ibid., pp. 16-19.

⁷³Robert D. Bhaerman, "Several Educators' Cure for the Common Cold, Among Other Things, or One Unionist View of Staff Differentiation," AFT Quest Paper 7 (Washington, D. C.: American Federation of Teachers, n.d.).

⁷⁴Ibid., pp. 1-2.

Some Suggested Criteria

The foregoing descriptions and views concerning differentiated staffing needed to be considered before the concept was incorporated into a framework of teacher education. Several things seem clear:

1. The way in which a differentiated staffing plan is put into practice probably has more to do with what teachers and others think about it than the concept itself.
2. Basic principles for planning and implementing change need to be followed by those responsible for it.
3. Preparation for differentiated staffing assignments ought to begin during the preservice education of teachers and maintained after employment.
4. The term "differentiated staffing" does not have to mean that there should be "better" or "worse" or "more important versus less important" teacher roles. It suggests different roles. This difference in interpretation may be largely responsible for much ambiguity.
5. Administrators as well as teachers and other instructional personnel need to be prepared adequately to function in a differentiated staff setting. For many persons this would be through intensive continuing education programs.
6. Teachers resist the notion of a vertical hierarchy, merit pay, peer-supervision, and having to make value judgments about their colleagues. Teachers are the "jewels in the watch" in a smoothly geared team of learning facilitators.

When does the teacher learn to do the things a differentiated staffing assignment may expect of him? Which should be included in preservice education? Which things can be left for continuing education? A recent college graduate summarized the basis of these questions when he said to the Student National Educational Association:

The only trouble is you expect a teacher to be an expert in subject matter, an expert in psychology, and a cross-cultural expert as well. No one man can be a master of all cultures. I don't think that's possible or feasible.⁷⁵

Are the demands on the role of the teacher becoming too great? If schools continue to insist that teachers fulfill all expectation of their role, will the teachers comply? Can they? Should they?

The differentiated staffing concept is one response to these questions. It is a response that says it is unreasonable to expect a single person to perform all the tasks necessary for teaching; therefore, teachers should learn to be specialists in certain of these tasks and, by working together as a team, provide effective learning for children.⁷⁶ Preservice education could respond in this context by preparing teachers for these specialized roles. Continuing education could respond by helping teachers adapt to new role specializations, new settings, and even to new contexts of education.

Continuing Education

Continuing education programs seek to change the behavior of instructional staffs to improve the learning opportunities for children. These programs vary in length of time, organizational arrangement, and in the kinds of activities provided. Most special-purpose programs are of short duration and rarely last more than a few days. Workshops, conventions, conferences, and seminars are examples of organizational arrangements for some of these short-term programs. Longer-term arrangements frequently include study committees and study groups, course work and seminars at nearby colleges, certain kinds of internship experi-

⁷⁵Mike Phelan, quoted in "The Gripes," Student Impact (Vol. 2, No. 2, January, 1970), p. 29.

⁷⁶The nine Model Elementary Teacher Preparation Proposals recently funded by the USOE describe programs which do this. See Chapter V, infra, for additional information.

ences, and research projects. Regardless of the arrangement, teachers should have the time to participate.

The kinds of activities used in continuing education programs vary. Until recently, the most frequent activities included lectures, group work, laboratories with simulated materials sessions, and field visits. Harris describes twenty-six distinctive activities that have been used successfully in continuing education programs:

Brainstorming	Interview, Nondirected
Buzz Sessions	Inter-visitations
Committees	Laboratories
Demonstrations	Lectures
Directed Practice	Meetings
Discussions	Observations
Exhibits	Panels
Field Trips	Reading
Film, T. V.	Role-playing
Firsthand Experiences	Tape Recording
Group Therapy	Testing
Interview, Structured	Writing ⁷⁷
Interview, Focused	

Within the last few years, research in teacher education has allowed some new activities to be added to this list, such as microteaching, macroteaching, minicourses, telelectures, taped tutorials, interaction analysis, sensitivity programs, videotaping, and computer usage. Some of these newer activities are extensions of those described by Harris. As new activities are developed and as more efficient ways are found for using the traditional ones, the quality of continuing education programs needs to continue to improve. The ways of continuing education should change at least as rapidly as the ways of learning, and the teaching of teachers should be evaluated with equal care as the teaching of children.

In a report summarizing the general practices and trends of in-service education in 1965, the National Commission on Teacher Education and Profes-

⁷⁷ Ben Harris, Supervisory Behavior in Education (Englewood Cliffs, New Jersey: Prentice-Hall, 1963), pp. 79-97.

sional Standards, NEA⁷⁸ noted that:

1. Professional school staffs were being used more widely in school systems and requests for outside consultants were limited to special needs.
2. Resource persons within school systems were conducting programs for noncollege credit.
3. More released time was being made available for teachers in the school systems.
4. Teachers were being paid extra for working beyond the routine school day, week, or year.
5. The length of the school year was being extended for teachers to provide them with needed in-service opportunities.
6. Special grants of funds and resources were being made available for extensive or comprehensive programs.⁷⁹ School systems were more willing to finance in-service programs for their teachers with such help.
7. Objective evaluation systems were being established by schools. Questionnaires, reaction sheets, and comments were typical, but planned statistical evaluations were unusual.

The need for effective evaluation in continuing education programs has been known for many years. In 1957 Kinnick, et. al. pointed out that:

⁷⁸National Commission on Teacher Education and Professional Standards, Current Practices in Inservice Education (Washington, D. C.: The Commission, 1965).

⁷⁹The New York State Education Department, for example, began supporting locally originated in-service projects with matching funds in 1966. The program (L.O.I.S.) is administered through the State Department's Bureau of In-service Education.

Evaluation of in-service programs by "evidence" of improved classroom teaching is the best evaluation, but we need many studies to help us discover why and how teachers change their perceptions and how those changed perceptions result in improved learning experiences in the classroom.⁸⁰

Another related problem has been the lack of coordination between pre-service and continuing education. A review of the literature by Denemark and MacDonald has revealed that a means for an effective linking between these two areas is needed:

Recognition of the growing complexity of the teacher's role, as knowledge expands and society turns more frequently to its schools for help in solving pressing social problems, makes apparent the need for effectively linking pre- and in-service education efforts. Again, to improve the relationship between the efforts requires a conceptual structure that will aid in determining the special functions assigned to each.⁸¹

Denemark and MacDonald found other problems too. They noted that grants in teacher education have been awarded almost exclusively to program development rather than to theory development or research activities. Another problem is the lack of research attempting to appraise the results of the many pilot projects designed for preparing teachers of the culturally disadvantaged. This may be because it is too early to determine outcomes. The need for improved ways to utilize available technology in teacher education is another problem worthy of additional investigation. By 1970 the potential force of new instructional media—for children as well as for teachers—has reached such magnitude as to make the education of American teachers impotent without training in their use.⁸²

⁸⁰B. Jo Kinnick, et. al., "The Teachers and the In-Service Education Program," in Nelson B. Henry, ed., In-Service Education (Chicago: University of Chicago Press, The Fifty-Sixth Yearbook of the National Society for the Study of Education, 1957), p. 152.

⁸¹George W. Denemark and James B. MacDonald, "Pre-Service and In-Service Education of Teachers," Review of Educational Research (Vol. 37, No. 3, June, 1967), p. 242.

⁸²Ibid., pp. 233-243.

In addition to the problems of planning, selecting activities, evaluating, and research, are those concerned with interagency coordination and cooperation. School-university, school-state department of education, and university-state department of education relationships need to be improved. The University of Maryland, for example, has initiated a teacher education center which is a unified and coordinated program of pre- and in-service experiences planned and administered by the University and the public school system.⁸³ In Ohio, there are several examples of cooperative school-university continuing education programs. The continuous pre- and in-service education program at the University of Dayton, the Vocational Orientation program for Counselors and Teachers of the Disadvantaged at the University of Toledo, and the Kent State University "Institutes for Improving Instructional Effectiveness of Vocational Teachers" are three of several in Ohio.⁸⁴

The State Department of Education has also been involved in continuing education programs. Some are conducted through universities, such as the statewide Vocational Recruitment Project, which is authorized under the Education Professions Development Act of 1967 (EPDA). Four Ohio universities, those of Cincinnati, Kent State, Ohio State, and Toledo, provide the necessary instructional personnel for the project, according to William Phillips, State EPDA Coordinator. Phillips reports nearly thirty state-approved teacher training projects currently operating in Ohio under EPDA B-2. One such project sponsored by the State Department of Education, Training Teachers to Relieve Critical Shortages, involved 175 teachers during the 1969-1970 school year. Through EPDA funds, the Department prepared more than 400 teacher trainees and more than 600 teacher aides. Figure 2 shows the scope of training areas covered in this project. Other State continuing education projects, some of which will be discussed later, include workshops and consultant services in guidance, special education, instructional materials development and urban education. The State's Right-to-Read Program is an example of one of these projects.

Despite all these projects, problems do occur. Duplication is one. It sometimes happens that school districts simultaneously plan similar programs for their staffs, unaware that they could be pooling their efforts to keep

⁸³Office of Laboratory Experiences, "The Teacher Education Center: A Unifying Approach to Teacher Education," (College Park, Maryland: College of Education, University of Maryland, mimeographed, n.d.).

⁸⁴The Ohio Council on Teacher Education, Innovation and Change in Ohio Teacher Education (Columbus, Ohio: The Council, 1970).

Fig. 2. – Locations of Ohio Project to Relieve Critical Shortages^a



 **Teachers**
 **Teacher Aides**
 **Both**

^aSource: William Phillips, State of Ohio Department of Education, EPDA Coordinator.

costs low and participation high. Another problem is the lack of coordinated resources. An outside consultant brought into a school district could be shared with other school systems if more coordination were available.⁸⁵ A third problem is the lack of funds. A review of the funding for these programs reveals that most of it comes from Federal sources. When this happens there is the danger that local needs become subservient to Federal desires. Since education is a function of the state, and since the state delegates much responsibility to the local school districts, continuing education programs need to be designed to meet local requirements. Means have to be found to enable improved coordination of efforts, resources, and funds if continuing education is to serve the needs of Ohio children better. To the extent that Federal funding programs help meet these requirements they should continue to be used. Consideration should be given to the feasibility of (1) State Foundation program monies being made available to support local continuing education programs, (2) local funds being utilized to support continuing education programs, and (3) combining Federal, State, and local resources to improve continuing education programs.

Which Ways to Progress?

The problems and issues presented in this Chapter are known to those concerned with the improvement of teacher education. More, perhaps innumerable problems exist. A comprehensive report on the extent and nature of many of these problems has been produced by the U.S. Office of Education, in accordance with the requirement of the EPDA.⁸⁶ The major problems discussed in this document include teacher militancy, the role of the schools as agents of social change, recruitment and selection, teacher dropouts, the discontinuity between preservice education and continuing education, differentiated staffing, the need for teachers of the culturally deprived and the poor, and the need for new emphases at the elementary and secondary school level.

⁸⁵Michael Usdane, et. al., Education and State Politics (New York: Teachers College Press, Teachers College, Columbia University, 1969), pp. 132-142.

⁸⁶U.S. Department of Health, Education, and Welfare, U.S. Office of Education, The Education Professions: A Report on the People Who Serve Our Schools and Colleges 1968 (Washington, D. C.: U.S. Government Printing Office, OE-58032, S.D.C. No. FS5.258:58032, 1969).

Some of these problems which have been viewed from a national perspective have also been considered on a state-wide basis in Ohio. An ad hoc committee, made up of State University Education Deans and the State of Ohio Deputy Superintendent of Public Instruction, recently published a tentative Master Plan Statement for teacher education.⁸⁷ The Master Plan points out that projections of teacher supply and demand indicate that there is already an oversupply of teachers, especially at the elementary level, and that this overage will probably continue through 1980:

The struggle to produce mere numbers is over. Although quality has always been a part of the task, it can now assume the position it deserves—first place. The range of changes can be broader because the challenge now is: to fill the classrooms with good, qualified teachers and to support them in service.⁸⁸

The Master Plan identified eight change areas holding essential considerations for prediction and planning. The first is selectivity, with the development and refinement of criteria for student selection a prime task in teacher education. The second area, in-service education, comprised the needs for (1) greater school-college staff cooperation in the implementation of in-service workshops, (2) greater school-preservice programs, and (3) exploring open admission to specialized postbaccalaureate degree programs for teachers.

The need for occupational education programs to be raised to the status of a "major" or "minor" in preservice education was cited as the third area. Fourth, teacher education programs spanning all four years of college are needed. Fifth, the student-teacher ratio in education courses "must be held to less than twenty-five to one."⁸⁹ The sixth area suggested that preservice education be revised to provide for the changing role of the elementary teacher. Closely associated to their changing role was the seventh suggestion, that colleges of education begin training personnel in education-related fields other

⁸⁷The Ad Hoc Task Force on Master Plan Statement, "Teacher Education (Tentative Master Plan Statement) July 23, 1970," (Columbus, Ohio: College of Education, The Ohio State University, multilithed, July 23, 1970).

⁸⁸Ibid., p. 7.

⁸⁹Ibid., p. 10.

than teaching. The eighth area encouraged the State Department of Education to rely on the institutions for certificate recommendations. The Master Plan predicted that "the trend toward greater cooperation of teacher educators and the State Department in the establishment of standards will be expanded in the next decade to the benefit of all."⁹⁰

Teacher education has been considered as comprising preservice education, continuing education, and differentiated staffing. These three facets were looked at separately in an effort to understand better some of the problems inherent in each. These problems, both expressed and implied—can be used as the basis for criteria which could be applied toward the development of models in secondary teacher education for Ohio. Some suggested criteria are that teacher education programs should:

1. Be based on the future learning needs of children and teachers and on the social needs of the future
2. Be based on learning experiences appropriate to meet the needs of teachers and teacher-trainees
3. Be based on theories of learning appropriate for secondary level as well as college level learning experiences
4. Be developed through the cooperative involvement of:
 - a) schools
 - b) colleges and universities
 - c) the state department of education
 - d) education organizations and associations such as the O. E. A., N. E. A. and AFT, professional agencies such as regional laboratories, research groups and ERIC Clearinghouses
 - e) communities and community agencies including municipal governments, business, civic and cultural groups, religious institutions, and agencies concerned with children

⁹⁰Ibid., p. 14.

5. Provide individualized learning
6. Provide means for teachers to assume a differentiated staffing role
7. Provide means for the development of knowledges, skills, attitudes and values, and normative behaviors
8. Provide professional learning experiences that enable teachers to change behavior in others successfully
9. Provide professional learning experience that enable teachers to continue their own professional education
10. Provide professional learning experiences that enable teachers to accept a functional differentiated staffing role
11. Provide learning experiences in a subject matter area that fosters continuing independent learning
12. Provide mechanisms for continuous evaluation
13. Provide mechanisms for recruiting and selecting suitable candidates for educational personnel
14. Be funded in such a way as to best serve the needs of the children of Ohio

CHAPTER III

HOW TEACHER EDUCATION WAS ASSESSED IN OHIO

Take green walnuts before the shell is formed, and grind them in a crab mill, or pound them in a marble mortar. Squeeze out the juice through a coarse cloth, and put to every gallon of juice a pound of anchovies, and the same quantity of bay-salt, four ounces of Jamaica pepper, two of long and two of black pepper; of mace, cloves and ginger, each an ounce, and a stick of horseradish. Boil all together and reduce to half the quantity. When it is cold bottle it close, and in three months it will be fit for use.

*—Richard Brautigan's recipe
for walnut catsup in Trout
Fishing in America.*

In this chapter the procedures used to gather and analyze data in the TEAP will be reviewed. Major topics include: (1) the assessment procedures, (2) construction of the Instrument, (3) sampling, (4) how the data were analyzed, and (5) the limitations of the study.

Why an Assessment Was Attempted

"We need to know where we are before we can tell where we are going," was the slogan for the 1970 U.S. Census. It could have been equally appropriate for the present study.

Historically, progress in teacher education has been slow. One reason for this slowness has been a general resistance to change among teacher

educators. Another is that many good suggestions for improvement are not brought to the attention of those who could do something about it. Lack of funds and an overwhelming awareness of some of the risks—staffing, financial, political, and social—are other reasons why advances have been slow.

Some headway has been made, however, The Model Elementary Teacher Education Project started by the U.S. Office of Education in 1967 has already produced ten new and innovative proposals.¹ The Elementary and Secondary Education Act of 1965 has also stimulated progress in teacher education. For example, the Multi-State Teacher Education Project funded through Title V involved the states of Florida, Maryland, Michigan, South Carolina, Utah, Washington, and West Virginia.² The Education Professions Development Act of 1967, which currently provides funds in fifteen different program areas is another illustration of Federal legislation which has helped advance American education.³ National associations and organizations, such as the National Commission on Teacher Education and Professional Standards, the American Association of Colleges for Teacher Education, and the Association for Student Teaching are currently producing, frequently with the help of Federal funds, many recommendations and guidelines for upgrading teacher education.⁴ The Ohio College Association and the Ohio Education Association recently funded a project conducted by the Ohio Council on Teacher Education "to demonstrate that teacher education in Ohio was neither dead nor deadly."⁵ The project report described 120 innovations and change projects as reported by 35 colleges

¹United States Office of Education, Request for Proposals, No. OE-68-4. October, 1967.

²Howard E. Bosley, Teacher Education in Transition (Baltimore, Maryland: Multi-State Teacher Education Project, Vols. I-II, May, 1969).

³U.S. Office of Education, Education Professions Development Act: Facts About Programs for 1971-72, EPDA Parts, B. C. D. and F., No. OE-58030-72. June, 1970.

⁴Cf.: American Association of Colleges for Teacher Education, Professional Teacher Education, A Programmed Design Developed by the AACTE, Teacher Education and Media Project (Washington, D. C.: The Association, July, 1968).

⁵Ohio Council on Teacher Education, Innovation and Change in Ohio Teacher Education (Columbus, Ohio: The Council, 1970), p. iii.

and universities. Still, with these many new possibilities, progress has been slow. If this trend is to change so that improvements could occur more rapidly, a five-step strategy is suggested.

First, a greater desire for planned and positive change in teacher education has to be established. An awareness and desire to change already exists to a great extent. Most teachers and teacher educators know that preservice and continuing education programs and differentiated staffing schema need to be changed in a positive direction if the schools are to continue to meet the demands of society. What seems to be missing now are the resources and the high priority placement needed for such change. An assessment of the current status of preservice and continuing education and differentiated staffing schema could, in conjunction with an effective dissemination of the findings, stimulate concerned persons to seek action programs for improvement.

Second, evidence must be gathered which will demonstrate that this need for planned positive change can be satisfied. The development of models and guidelines do not always constitute acceptable evidence for successful teacher education programs. The present report may be no different; but it is hoped that portions of it could stimulate further investigation which will result in still greater improvements.

Third, information systems have to be established so that institutions responsible for strengthening teacher education could consider potential improvements. When new models are developed they should be shared with colleges and universities, with schools, with the State Department of Education, with research search and professional associations and organizations, and other concerned groups. This step is closely associated with step one, above.

Four, the institutions responsible for providing components of teacher education should analyze the feasibility of implementing appropriate new models. The educational institutions would have to determine the amount of money, staff, and other resources needed to operate the models.

The fifth step would be to make the resources available to operationalize the models. This would include delineating criteria for responsibility and accountability. That is, those institutions using the resources need to be charged with some responsibility for the outcomes. It is important that people be held accountable for achieving that portion of the results which were charged to them. This will require the development of measurable objectives and means of evaluation. The results of any such evaluation would be incorporated into revisions begun at step two.

The present assessment of teacher education in Ohio is basic to this five-step strategy. Other strategies may exist, but the present one, as used in business and other professions, has been found to be most useful and effective for achieving positive results.

The present study cannot provide all the inputs required for carrying out all steps in this strategy. Major emphasis will be made in the development of models for secondary teacher education. Portions of the constructs could be adapted to the elementary level. Emphasis is made at the secondary level because much has already been done at the elementary level through the recent USOE Models. Further, research regarding the supply and demand of elementary teachers conducted at the Ohio State University showed that "...over the next decade, Ohio is likely to experience a significant oversupply of 'regular' elementary teachers relative to demand."⁶ The NEA has pointed out that widespread shortages of beginning teachers are expected to continue in secondary school mathematics and science. Other shortages have been predicted in special education, vocational-technical courses, women's physical and health education, industrial arts, and in distributive education.⁷

How the Assessment Was Conducted

Teacher education was divided into three areas: preservice education, continuing education, and differentiated staffing. Places in Ohio where activities in each of these areas were being conducted were identified and located. These places included colleges and universities, schools, the State Department of Education, and professional organizations such as The Ohio Council for Teacher Education and the Teacher Education Committee of the Cleveland Commission on Higher Education.

The next task was to find out what was happening in these places and to determine the extent of their involvement. To that end, several steps were taken. First, descriptive literature was collected from a selected sample of

⁶ College of Education, The Ohio State University, "A Feasibility Study of Four Year Elementary Teacher Training at Branch Campuses in Ohio" (Columbus, Ohio: The University, mimeographed, June, 1970), p. 3.

⁷ Research Division of the National Education Association, Research Report 1970-R14: Teacher Supply and Demand in Public Schools, 1969 (Washington, D. C.: National Education Association, 1970).

teacher preparation institutions, including catalogs, mimeographed handouts and brochures, booklets, newsletters, flyers, and other informational materials. Second, publications and descriptive literature about differentiated staffing and continuing education were reviewed from public schools across the state. Third, these data were organized and synthesized so that existing profiles of activities in preservice and continuing education and differentiated staffing schema could be examined. First-hand observations were also conducted. Interviews and conferences were held with members of the Project Advisory Panel. Discussions were held with school and university staffs and students. Conferences were conducted with representatives of various state and national organizations including the Ohio Education Association, the National Commission on Teacher Education and Professional Standards, NEA, the National Association of Secondary School Principals, the State of Ohio Department of Education, and others concerned with improving teacher education.

The fourth task was the development and administration of a data-gathering instrument. The purposes of this instrument were to help determine the status of teacher education in Ohio and to gather opinions from persons concerned about teacher education. This instrument contained two parts. Part I, Institutional Survey Data (ISD), was designed to gather demographic and procedural information from the sample institutions. Type of institution, accreditation, enrollment, academic standards, graduation requirements, and student teaching procedures are examples of some of the kinds of information sought in the ISD. The format of the ISD was based on the State of Ohio Department of Education, "State Inspection Report." The latter Report was revised and streamlined to fit the purposes of the TEAP.⁸

Part II of the instrument, the Teacher Education Assessment Survey (TEAS), was based on an authoritative conceptual framework of the three major study areas. The items for the TEAS were constructed according to available research, literature, and current thinking on teacher education. The purposes of the TEAS were (1) to find out, from college professors, high school principals, and from high school teachers, what was happening, their opinions about what was happening, and when they saw certain teacher education activities occurring in their respective institutions, and (2) to find out from college and high school students what they thought should be happening in teacher education and when these activities should occur, if at all.⁹

⁸A copy of the ISD is shown in Appendix I.

⁹A copy of the TEAS is shown in Appendix III.

The instrument was administered to college professors, high school principals and teachers, and college and high school students. The responses were used in developing models for improving teacher education.

How the Literature Search Was Conducted

A variety of sources was used to identify the published materials related to teacher education. College bulletins and catalogues, mimeographed brochures, the Education Index, several of the ERIC Clearinghouses, especially that on Teacher Education, published bibliographies, indexes to research journals and journal abstracts such as Research in Education (RIE), public documents and records, and suggestions from the Project Advisory Panel were all used to identify significant literature and research.

Most of the materials were available as books or articles. Some were available only as microfilms or as microfiche. Reprints ranged from mimeographed handouts to "hard cover" reproductions produced by ERIC. In all, over 300 documents were reviewed.

As the materials were read they were abstracted and sorted according to preservice education, continuing education, and differentiated staffing. The literature in each area was reviewed a second time and divided according to the area subtopics to which it was addressed. Preservice education was found to be the most popular area among the authors, with thirteen subtopics identified. The differentiated staffing and continuing education areas were organized into two subtopics each.¹⁰

Certain items spanned several subtopics. These were classified as "general" and have been included in the Bibliography at the end of this report. For the present study, the subtopics comprising each area were regarded as parameters for teacher education. The preservice education parameters were:

1. Purposes and Methods of Preservice Education

Articles in this subtopic concerned the general goals, aims, and objectives of preservice teacher education and the general philosophy of secondary teacher preparation programs.

¹⁰See pages 106-108, infra.

2. Responsibility and Accountability for Preservice Education

Articles in this subtopic concerned the roles of the different agencies affecting secondary teacher preparation programs in Ohio, e.g., the universities, the State Department of Education, the public schools, and the various organizations and associations.

3. Liberal Arts Program

Articles in this subtopic concerned the kinds of general knowledge which secondary teachers-in-training pursue; e.g., English, natural and social sciences, and mathematics.

4. Recruitment, Selection and Retention

Articles in this subtopic were concerned with methods for attracting new people into education, choosing criteria for selecting those who should pursue a career in education, and practices used to keep them in it.

5. Psychology and Human Development

Articles in this subtopic were concerned with the kinds of knowledge that are related to the area of psychology and human behavior and development that are required for secondary school teachers.

6. Cultural Foundations

Articles in this subtopic were concerned with the kinds of knowledge related to concepts regarding the setting of American education, including educational philosophy, educational sociology, and the history of American education that are required for secondary school teachers.

7. Professional Standards, Certification, Placement, and Welfare

Articles in this subtopic were concerned with the kinds of knowledge, relating to concepts regarding professional attitudes, beliefs, and behaviors.

8. Planning and Developing Learning Activities

Articles in this subtopic were concerned with the kinds of knowledge required for secondary school teachers, relating to the design and preparation of children's educational experiences. Topics included resources, curricula, and the application of theory.

9. Organizing and Providing for Learning Activities

Articles in this subtopic were concerned with the kinds of knowledge required for secondary school teachers, relating to grouping and arranging for instructional strategies, implementing educational experiences, and the general use of educational technology. Topics included team teaching, nongradedness, and the use of instructional materials.

10. Evaluating and Improving Learning Activities

Articles in this subtopic were concerned with the kinds of knowledge required for secondary school teachers, relating to making and using value judgments in the school setting. Evaluating pupil progress, determining professional strengths and weaknesses, and maintaining professional skills are included.

11. Laboratory Experiences

Articles in this subtopic were concerned with the kinds of on-campus opportunities secondary teachers-in-training need to have to develop certain practical teaching skills. Observing, microteaching, and individualized tutoring are examples of the kinds of experiences included.

12. Student Teaching

Articles in this subtopic were concerned with the kinds of college and school-supervised off-campus laboratory experiences required for secondary teachers-in-training (sometimes referred to as cadet teaching or practice teaching).

13. Internships

Articles in this subtopic were concerned with the kinds of preparatory, actual teaching experiences secondary school teachers need before certification. Internships are usually full-time supervised teaching positions held following a Bachelor's degree in liberal arts. They are frequently included in Master of Arts in Teaching Programs.

The Continuing education parameters were:

1. Purposes and Methods of Continuing Education

Articles in this subtopic were concerned with the general goals, aims and objectives of teacher education following certification and placement, including its procedures and outcomes (frequently referred to as in-service education).

2. Responsibility and Accountability for Continuing Education

Articles in this subtopic were concerned with the roles of the different agencies affecting secondary teacher-in-service education programs in Ohio. The universities, the State Department of Education, the public schools, and organizations and associations are examples.

The differentiated staffing parameters were:

1. Purposes and Methods of Differentiated Staffing

Articles in this subtopic concerned the general goals, aims, and objectives of using the specialized skills of school personnel. Related topics included the use of paraprofessionals, teacher aides, and educational technologists.

2. Responsibility and Accountability for Differentiated Staffing

Articles in this subtopic were concerned with the roles of the different agencies affecting differentiated staffing programs in Ohio, and included the training of such personnel as paraprofessionals, teacher aides, and other educational assistants.

The Instrument

This section of the report describes how the two-part instrument for the TEAP was developed.

How the Instrument Was Developed

Part I. Institutional Survey Data (ISD)

This part of the instrument was patterned after the State of Ohio "State Inspection Report."¹¹ The purpose of the ISD was to learn some of the major patterns of operation in teacher education institutions. Eleven broad areas were selected.

Area one sought to identify the number of persons responsible for different aspects of the institution's teacher education programs. Area two sought to identify the type of institution. This included support and control information and some historical data regarding accreditations and authorizations for degree conferrals.

Area three requested enrollment data. Areas four and five sought descriptions of the institutions' standards for admission and for selection and retention in the preservice program, respectively.

Area six requested information about guidance and placement services. It included requests for descriptions of how students are kept informed about certification, job openings, and transfer procedures.

Area seven sought information on graduation standards, including data on grading, residence and curriculum requirements, and numbers of anticipated graduates by field of subject specialization. Area eight related to student teaching. This area attempted to determine how student teachers were supervised, length of the experience, and the number of student teaching centers.

Areas nine, ten, and eleven were open-ended questions. They sought to learn how the institutions' teacher education programs were evaluated, their

¹¹Division of Teacher Education and Certification, "Inspection Report: Teacher Education" (Columbus, Ohio: State Department of Education, mimeographed, n.d.).

short-range plans for research and experimentation, and how their Departments of Education were organized and operated. A copy of the ISD is shown in Appendix I.

Part II. The Teacher Education Assessment Survey (TEAS)

As the literature was reviewed, the recommendations and major findings of the authors were noted. When similar recommendations for improving teacher education were made by several authors, they were recorded on a special list. This procedure resulted in more than 500 suggestions, recommendations, prescriptions, and descriptions relative to each of the parameters described earlier. The list was then edited.

Duplications were eliminated. Some were combined to streamline the list as much as possible. The revised list was then reviewed by members of the Project Advisory Panel to assure that most of the current authoritative statements and recommendations concerning teacher education were included, and to provide some measure of validation. A description of how this validation was conducted is presented in a later section of this chapter.

The completed list contained 232 authoritative statements. Nearly all were paraphrased from the research literature. A few were based on suggestions made by Panel members. Because of the way in which the list was developed, each statement belonged in one of the parameters described. To avoid any consequences of the "halo effect," the items were spaced as randomly as possible. Too much randomness would have created more confusion for the respondent. The statements, and their corresponding parameters were:

1. Purposes and Methods of Preservice Education

All secondary teachers-in-training should follow the same preparation program sequence (32)¹²

The teacher preparation program should be based on a written foundation of educational philosophy developed by students and faculty (33)

The teacher preparation program should be based on the current learning problems of secondary school students (34)

¹²The numbers in parentheses are item numbers in the TEAS.

Teacher preparation institutions should plan to substantially reduce the number of professional education courses (35)

Professional education courses should have carefully defined behavioral objectives, that is, definite skills that students should have when they finish the courses (36)

The professional sequence should provide for individual differences in student ability (37)

Teacher preparation programs should strongly encourage all students to begin their training program at the same time (41)

The academic discipline, that is, the subject someone plans to teach, should be considered the most important ingredient in secondary teacher preparation (51)

The major difference between elementary and secondary teacher preparation is that the latter should have more emphasis on an academic discipline (52)

The secondary teacher preparation program should provide a broad background in the major academic discipline (subject area, e.g., biology) with a strong concentration in a minor discipline (e.g., botany) (53)

The secondary teacher preparation program should move from text-book type learning to first-hand, or actual experiences (62)

Secondary teachers-in-training should be taught mostly via programmed learning, a form of instruction paced by the learner (69)

For the most part, secondary teachers-in-training should be taught by the entire university faculty according to how they would be expected to teach; i.e., according to the methods they are expected to use (70)

Secondary teacher preparation programs should stress an international rather than national perspective (71)

The secondary teacher preparation program should reflect the increasing variety of jobs a teacher must do (73)

The liberal arts or general education program should precede the professional training program (74)

The liberal arts or general education program for secondary teachers-in-training should constitute about half of the course work required for the Bachelor's degree (76)

The liberal arts program should provide college students with the basis for selecting the subject field they intend to teach (77)

2. Responsibility and Accountability for Preservice Education

High school teachers should be specialists in an academic discipline, not generalists (54)

The universities should have a regular procedure for keeping the contents of their secondary teacher preparation program up-to-date (60)

Teacher training programs for secondary teachers should be set up mainly by teacher organizations, such as the Ohio Education Association, or the American Federation of Teachers (63)

The professional sequence for the training of secondary teachers should be set up mainly by the State of Ohio Department of Education (64)

Teacher preparation programs are best left to the university's Department of Education (65)

Secondary teacher preparation programs should be mostly influenced by the liberal arts scholars (66)

Professors who share in the responsibility for preparing secondary teachers should be familiar with the everyday problems of public schools (67)

Professors who share in the responsibility for preparing secondary teachers should be familiar with the policies and procedures of the local schools (68)

3. Liberal Arts Program

The Liberal arts program for high school teachers should include required course work in:

Behavioral sciences, e.g., general psychology (78)

Natural sciences, e.g., zoology, physics, chemistry (79)

Social sciences, e.g., history (80)

Humanities, e.g., literature, fine arts, and philosophy (81)

Mathematics (82)

Foreign Language (83)

Practical arts and the world of work (84)

Physical education (85)

Communications skills (86)

4. Recruitment, Selection, and Retention

Teacher preparation programs should be based on the concept that anyone who can complete the requirements for a Bachelors' degree can learn to be a teacher (38)

Ohio colleges should recruit students in teacher education primarily from Ohio (39)

The State of Ohio should make financial loans available for able and needy students who wish to become teachers (40)

Admission to a teacher preparation program should be based on a carefully planned screening procedure, i.e., highly selective (42)

Admission to a teacher preparation program should include the following criteria for students:

demonstrated ability to communicate effectively (43)

above average intelligence (44)

good physical health (45)

emotional stability and maturity (46)

record of high academic achievement in college (47)

evidence of commitment to teaching (48)

demonstrated ability to work with children (49)

The academic progress of students enrolled in teacher preparation programs should be reviewed regularly (50)

All secondary teachers-in-training should receive instruction in how to recruit others into the education profession (92)

5. Psychology and Human Development

All secondary teachers-in-training should receive instruction in:

the principles of adolescent psychology (96)

how to apply the principles of adolescent psychology in the classroom (97)

how to help high school students adapt to their community (101)

How to demonstrate respect for secondary school students (104)

the principles of guidance and counseling (107)

how to apply the principles of guidance and counseling (108)

how to help youth build constructive value systems

for themselves (118)

general educational psychology (120)

how to apply the principles of educational psychology (121)

the principles of human growth and development (122)

how to apply the principles of human growth and development (123)

how to develop leadership skills in secondary school students (137)

theories of learning (140)

how to apply the theories of learning to what happens in the classroom (141)

6. Cultural Foundations

All secondary teachers-in-training should receive instruction in:

the principles of educational finance (94)

how to use principles of educational finance (95)

contemporary issues in education (98)

the organization and administration of American education (100)

the principles of social psychology (109)

how to apply the principles of social psychology (110)

the principles of educational philosophy (111)

how to apply the principles of educational philosophy (112)

the principles of social philosophy (113)

how to apply the principles of social philosophy (114)

the principles of educational sociology (115)

how to apply the principles of educational sociology (116)

urban sociology and psychology (119)

how to decide what is important to teach and what is not (131)

school-community relations (132)

how to use, conceptualize, and synthesize knowledge (144)

the history of education (145)

how to help students become responsible community citizens (148)

7. Professional Standards, Certification, Placement, and Welfare

Universities should have a placement service, or some other agency to help its graduates get a good teaching job (55)

The university should follow up on all, or nearly all students after placement (56)

Teachers should be certified to teach in only one subject area, for example, English; not English and French (57)

Universities should base their recommendation for certification on demonstrated performance rather than on the number of college credits a student has (58)

Placement services should be provided only for those students whom the university recommends for certification (59)

All secondary teachers-in-training should receive instruction in how to develop educational policies (90)

All secondary teachers-in-training should receive instruction in teacher welfare and certification (146)

8. Planning and Developing Learning Activities

All secondary teachers-in-training should receive instruction in:

- the principles of secondary education (87)
- how to apply the principles of secondary education (88)
- educational leadership functions (91)
- how to use the resources of the State Education Department (99)
- the theories and applications of programmed learning (125)
- the principles of secondary curriculum construction (128)
- how to apply the principles of curriculum development (129)
- how to apply educational theory in the classroom (133)
- how to use community welfare and other similar agencies outside the school (134)
- how to make, select, and use learning materials and equipment (150)
- how to use the resources of research agencies (151)
- how to develop self-directing, sequenced learning materials for independent study (154)
- how to apply the experiences gained through foreign and domestic travel in the classroom setting (160)

9. Organizing and Providing Learning Activities

All secondary teachers-in-training should receive instruction in:

- how to handle social events (extra-curricular activities, chaperoning) (89)
- how to organize a class for effective instruction (93)
- how to use small and large group instruction effectively (102)
- how to function as a member of a teaching team (103)
- how to prepare and use simulation materials (105)
- how to use themselves as learning resources for secondary school students (106)
- how to meet individual differences by providing meaningful individualized learning activities (117)
- how to provide learning activities in a non-graded school (126)
- how to plan and teach in the framework of a modular or other type of flexible schedule plan (127)
- how to use instructional technology, such as educational television and computer-assisted instruction (136)
- how to develop a sense of creativity in secondary school students (138)
- how to manage a secondary school classroom (139)
- how to be creative or how to use their own extant creative abilities in the classroom (142)
- methods of teaching (143)
- how to conduct a self-contained class (147)
- how to establish a positive classroom climate (149)

how to use instructional materials centers and similar resources (156)

how to use students as tutors (i. e., one student to give individual help to another student) (157)

the duties and responsibilities of teacher aides and other paraprofessional personnel (162)

10. Evaluating and Improving Learning Activities

All secondary teachers-in-training should receive instruction in:

using and applying educational research, including statistics (124)

how to evaluate and report student progress (130)

how to plan, participate in, and contribute to programs in continuing education (152)

how to keep up with new curricula and new methods (153)

how to keep up with new developments in educational technology (155)

how to conduct and/or participate in cooperative educational research projects (158)

how to participate in an accreditation team such as the National Council for the Accreditation of Teacher Education of the North Central Association of Colleges and Secondary Schools (159)

how to identify their own professional strengths and weaknesses and translate them into behavioral objectives for the future (161)

11. Laboratory Experiences

Professional education courses should be provided only via clinical and first-hand laboratory experiences, that is, learning by doing (61)

Laboratory field experiences, such as observing and teaching a brief lesson in a public school, should be provided as a part of the professional preparation program (163)

New forms of practical learning or laboratory experiences need to be developed in the universities; that is, new ways to teach teachers how to teach (188)

The amount of student laboratory experiences should increase gradually, beginning at the start of the program (189)

All teachers-in-training should participate in simulation exercises; that is, "real" experiences (190)

Teachers-in-training should have opportunities to work with secondary school students on an individual basis (191)

Teachers-in-training should participate in microteaching; that is, teach a short lesson to a very small group of high school students and get an immediate evaluation (192)

Laboratory experiences should be used to help teachers-in-training learn how to evaluate the effects of their teaching (193)

Universities should provide opportunities for microteaching as a team member (194)

Opportunities should be available for teachers-in-training to participate in awareness training (195)

12. Student Teaching

All secondary teachers-in-training should receive instruction in how to supervise student teachers (e.g., how to serve as a sponsor- or cooperating-teacher) (135)

Student-teaching should be followed by additional course work (175)

Feedback from student-teachers and cooperating-teachers should be regularly incorporated into teacher-training course revisions (176)

Student teaching assignments, that is, where someone is sent to do practice- or student-teaching, should allow for individual student differences (177)

Student-teachers should participate in group counselling sessions (178)

The period of student teaching should be long enough to allow for individual style to be developed (179)

The student-teaching experience should be long enough to allow the development of teacher-role assumption, not teacher-role playing (180)

Cooperating-teachers should be selected by school principals (181)

Cooperating-teachers should be selected by university faculty (182)

Student-teaching performance should be a criterion for keeping someone in the teacher training program (183)

Cooperating-teachers as well as student-teachers should be told beforehand what their duties and responsibilities will be (184)

Student team-teaching, that is, working with other teachers in preparing and presenting a lesson, should be a regular part of the student-teaching program (185)

Student-teachers should get experience in an urban setting (186)

The student-teaching program should provide opportunities for experience in all phases of teachers' work (187)

13. Internships

Secondary teacher preparation should be in separate agencies of higher education, like medicine and law, and should have as a prerequisite, the Bachelor's degree (23)

The Internship, a program of teacher training that usually requires about a year of regular school teaching before a certificate is given, should be a part of every professional preparation program (164)

Admission to an internship program should depend on the following criteria:

student-teaching success, that is, successfully completed a program of supervised practice teaching under an experienced school teacher and guided by a college professor (165)

faculty recommendations (166)

scholastic rank (167)

character (168)

success in courses dealing with teaching methods (169)

Interns should get paid (170)

The internship should last more than one academic year (171)

The internship should last less than one academic year (172)

Internships should be accompanied by concurrent course work (173)

Internships should be given after the Bachelor's degree (174)

14. Purposes and Methods of Continuing Education

Continuing education is more important for teachers than preservice education (28)

What happens in the secondary school classroom is the most significant outcome of continuing teacher education (30)

Secondary school teachers should visit other schools and watch other teachers teach (198)

Continuing education programs should stress the non-tutorial role of teachers; that is, those things not directly dealing with instruction (227)

Continuing education workshops should be conducted as demonstration models; that is, conducted in the way the teachers would be expected to teach (229)

Continuing education programs should be used by school administrators to identify prospective administrators and supervisors for their districts (231)

Continuing education programs should frequently stress academic subject matter content (232)

15. Responsibility and Accountability for Continuing Education

Continuing education should be developed and paid for by the public school district (24)

Continuing education should be developed by the school district and paid for by the State of Ohio Department of Education (25)

Continuing education should be developed and paid for by the State of Ohio Department of Education (26)

Continuing teacher education should be a responsibility of both the public schools and the universities (27)

The development of continuing education programs is the responsibility of the public schools (29)

The Ohio State legislature should provide leadership for universities to coordinate public elementary and secondary education with higher education (72)

School districts should earmark a regular percentage of their budget to research and continuing education (196)

School districts should provide their teachers with paid sabbatical leaves; that is, allow teachers a year of absence every seven years, at about half salary, to permit an opportunity for travel or further study (197)

School districts should use holiday or vacation time, such as Christmas and Thanksgiving, for continuing education programs (199)

Teachers who participate in continuing education programs should be paid extra (200)

Teachers should participate in at least two weeks per year of continuing education (201)

Schools should use the State Education Department guidelines for continuing education programs (202)

School districts should provide continuing education programs for substitute teachers (226)

College professors should conduct continuing education workshops in school districts during the regular school year (228)

School teachers and university professors should meet regularly to discuss professional problems (230)

16. Purposes and Methods of Differentiated Staffing

Differentiated staffing could allow for the more effective use of teacher talent (2)

Differentiated staffing can decrease the number of teachers who leave teaching (4)

Teacher education programs can be made more specific as differentiated staffing roles become better defined (5)

Differentiated staffing can create more jobs for the economically poor

by allowing schools to hire community people to become teacher aides or paraprofessionals (6)

Differentiated staffing could help relieve the shortage of help in classrooms (7)

Differentiated staffing can serve as a valuable link between the schools and the community (8)

Differentiated staffing can provide children with more individualized instruction (9)

Differentiated staffing could allow for a more flexible schedule (10)

Differentiated staffing could improve intercultural contacts (11)

Differentiated staffing could provide additional male models for male students (12)

Differentiated staffing positions could provide for voluntary upward mobility for some paraprofessional personnel (13)

Differentiated staffing positions should be based on educational backgrounds and experiences (15)

Differentiated staffing could allow the teacher more time for preparing lessons (16)

Differentiated staffing could allow teachers more opportunities to experiment and innovate (18)

Differentiated staffing could enable teachers to develop better courses and curriculums (19)

Differentiated staffing is just a way to pay teachers according to their ability rather than according to their experience and educational background (21)

Differentiated staffing is primarily a device for improving the learning opportunities of secondary school students (22)

Teachers ought to work together for improving what happens in the classroom (203)

Training programs for auxiliary educational personnel such as paraprofessionals and teacher aides should provide instruction in:

- how to tutor secondary school students (205)
- how to help secondary school students do independent study (206)
- how to help secondary students organize extracurricular activities (207)
- how to set up audiovisual equipment (208)
- how to help teachers with students who have problems (209)
- how to serve as laboratory assistants, e.g., chemistry (210)
- how to help the teacher in reading and evaluating students (211)

Training programs for auxiliary educational personnel, such as paraprofessionals and teacher aides should provide instruction in:

- how to help the teacher with instructional activities in art, music, and on field trips (212)
- how to file educational materials (213)
- how to operate duplicating equipment (214)
- how to type (215)
- how to record grades (216)
- how to supervise cafeterias, hallways, and lavatories (217)
- how to help in the library (218)
- how to distribute instructional materials (219)
- how to supervise clean-up activities (220)
- how to communicate with secondary school students (221)

how to use other staff members' skills effectively (222)

Preparation for paraprofessional personnel should be primarily first-hand rather than theoretical or second-hand (224)

Teachers and paraprofessionals should participate together in course work (225)

17. Responsibility and Accountability for Differentiated Staffing

Gifted teachers should be allowed to exert a much greater influence on their students and colleagues than less gifted teachers (1)

Different amounts of teaching responsibility should allow for salary differences (3)

The training of paraprofessionals and teacher aides should be the joint responsibility of the schools, the universities, and the State Department of Education (14)

Different methods of recruiting and training are needed to provide for a differentiated instructional staff (17)

Differentiated staffing would be acceptable as long as everyone is directly responsible to the principal (20)

Teacher aides should be responsible to no more than five teachers (31)

School systems and colleges need to train paraprofessionals and teacher aides (204)

Before teacher aides, paraprofessionals, and other auxiliary educational personnel are admitted to a training program, they must show evidence of a commitment to the field of education and to their own continued growth (223)

The Sample

To conduct a comprehensive survey assessment of all fifty-two accredited teacher preparation institutions¹³ and all 680 public school districts¹⁴ in Ohio was admittedly too formidable to tackle. A stratified random sampling procedure was devised to achieve some representation for the state. Eight teacher preparation institutions were selected to provide the data necessary for the assessment. Liaison persons from each institution were also selected. These persons (1) arranged for the completion of Part I, Institutional Survey Data, (2) invited professors at their institutions to respond to Part II, Teacher Education Assessment Survey (TEAS), Form CP, and (3) arranged for the administration of the TEAS to high school and college students (Form S) and high school teachers and administrators (Form TA).

How the Institutions Were Selected

The names of each teacher preparation institution cited in the Ohio Education Directory 1969-1970¹⁵ and in the listings of the American Council on Education,¹⁶ were reviewed and categorized according to four criteria: enrollment, location, support, and student body. Enrollments ranged from 416 at Athenaeum of Ohio in Norwood to 45,262 at Ohio State University, Columbus. The mean enrollment for all institutions was 5,704. Thirty-eight of the institutions had enrollments above the mean.

The locations of the institutions were classified as either urban or nonurban.

¹³American Council on Education, Accredited Institutions of Higher Education 1969-70, (Washington, D. C.: The Council, 1969), and Divisions of Elementary and Secondary Education and Computer Services and Statistical Reports, Ohio Educational Directory, School Year 1969-1970 (Columbus, Ohio: State of Ohio Department of Education, 1969).

¹⁴According to: Division of Computer Services and Statistical Reports, "Costs Per Pupil School Year 1967-68" (Columbus, Ohio: State of Ohio Department of Education, 1968).

¹⁵Divisions of Elementary and Secondary Education Computer Services, Ohio Directory, 1969.

¹⁶American Council on Education, Accredited Institutions, 1969.

The urban institutions were situated in the following Ohio metropolitan areas: Akron-Canton, Cincinnati, Cleveland, Columbus, Dayton, Toledo, and Youngstown. Twenty-two institutions were urban and thirty were nonurban according to this classification.

Institutional support and student body classification were the third and fourth criteria for sample selection. Ohio had twelve public (or state-controlled) and forty nonpublic (privately supported) institutions, and two for men and eight for women.

From these fifty-two institutions, eight, or approximately 15 percent of the total, were selected.

Description of the Institutions in the Sample

Institution 1. This small, nonurban, church-affiliated college had a total enrollment of more than 700 students for the 1969-1970 school year. More than 61 percent, or nearly 440 students, were enrolled in a teacher preparation program. For the 1969-1970 school year, it awarded Bachelor's degrees to 150 men and women and planned to recommend 106 persons for teaching certificates, including 33 at the elementary level, by the end of summer, 1970.

Institution 2. This small, nonurban, church-affiliated college had a total enrollment of nearly 1,100 men and women during the 1969-1970 school year. College officials estimated that 65 to 70 percent of its graduates are recommended for certification to teach in Ohio secondary schools each year. For 1969-1970 Bachelor's degrees were awarded to 245 persons. Ninety-three were recommended for secondary school certification.

Institution 3. This small, nonurban, private college had a total enrollment of approximately 1,900 men and women during the 1969-1970 school year. About 150 of these students, or 8 percent, were enrolled in teacher education programs. For 1969-1970 more than 350 were graduated with Bachelor's degrees and 12 persons were recommended for secondary school certification.

Institution 4. This small, nonurban, private institution had a total enrollment of approximately 2,700 men and women in its College of Arts and Sciences during the 1969-1970 school year. Fewer than 100, or 4 percent, of

these undergraduates pursued programs in teacher education. For 1969-1970, the college awarded about 500 Bachelor's degrees. Nearly 50 persons were recommended for secondary school certification.

Institution 5. This large, urban, church-affiliated university had a total enrollment of nearly 6,100 men during 1969-1970. Approximately 500, or more than 8 percent, were enrolled in a teacher education program. For 1969-1970, about 600 Bachelor's degrees were awarded and 160 persons were recommended for secondary school certification.

Institution 6. This large, urban, church-affiliated university reported a total enrollment of 8,900 men and women for 1969-1970. More than 1,750 students, or nearly 20 percent, were enrolled in a teacher education program. Bachelor's degrees were awarded to 1,790 students. Officials estimated that 195 persons were recommended for secondary school teaching certificates.

Institution 7. This large, nonurban, public university had a total enrollment of approximately 26,400 men and women during 1969-1970. About 6,000, or nearly 23 percent, pursued some teacher education program. There were 3,633 students enrolled in the College of Education, and 1,400 additional students who were in some program of teacher education apart from the College of Education. One thousand more freshman students have already indicated their desire in enrolling in some teacher education program. This university awarded 3,650 Bachelor's degrees in 1970, and recommended 814 for secondary teaching certification.

Institution 8. This large, urban, public university had a total enrollment exceeding 52,000 men and women for 1969-1970. Approximately 6,500, or almost 13 percent, were enrolled in teacher education programs. For 1969-1970, 8,494 Bachelor's degrees were awarded and 2,029 were in the College of Education. More than 1,200 students were recommended for secondary school teacher certification for the 1969-1970 school year.

Table 1 summarizes these sample data. Inspection of the table reveals there were four large and four small institutions, three urban and five non-urban, seven coeducational and one noncoeducational, and six private and two public institutions. It is interesting that Institution 2, with an enrollment of 1,065, had an estimated 713 students pursuing some program in teacher educa-

TABLE 1 — Summary Description of the Sample for the TEAP

Institution	Enrollment ^a	Location ^b	Student ^c Body	Support ^d	Number in Teacher Education ^a	Number Recommended for Certification ^a	Number Bachelor's Degrees ^a
1	713	N	C	P	436	73	150
2	1,065	N	C	P	713	93	245
3	1,900	N	C	P	150	12	350
4	2,700	N	C	P	100	50	500
5	6,069	U	M	P	500	160	600
6	8,900	U	C	P	1,753	195	1,790
7	26,412	N	C	S	5,033	814	3,650
8	52,125	U	C	S	6,523	1,206	8,494

^aAs reported by the institution for the 1969-1970 school year^bN = nonurban; U = urban^cC = Coeducational; M = Men^dP = Private; S = Public (State-supported)

tion—more than the three other small institutions combined.

Table 2 compares selected sample data with similar state-wide data. Analysis of this table shows that the proportion of large institutions in the state is not significantly different from the proportion of large institutions in the sample. Statistical tests of the significance of the difference between two proportions reveals that in none of the sample criteria was there a significant difference (at the .05 level or better) between the state distribution and the sample. For example, Table 2 shows that 12 out of 52, or nearly 23 percent, of the institutions in Ohio are publicly supported. The sample distribution shows that 2 out of 8, or 25 percent, are publicly supported. The difference between the two proportions (23 percent and 25 percent) is not significant. This means that the sample could be regarded as representative of Ohio, at least to the extent of enrollments, locations, student body classification, and support. Further analysis of other available data¹⁷ shows that the colleges and universities in the sample represent more than 30 percent of all college and university students in Ohio attending accredited teacher preparation institutions.

How the High Schools Were Involved

In addition to college professors' responses to the TEAS, responses were needed from staff and students in the public high schools. The high school sample was derived from the eight sample institutions. This was possible since each institution was affiliated with schools through their student teaching programs. By inviting participation of schools connected with the sample institutions, suitable geographic distribution was assured and institution-school cooperation was encouraged.

The liaison person at each institution was asked to identify such high schools connected with his institution that the following sample could be obtained:

1. Ten tenured secondary school teachers. These were defined as high school teachers who had at least three years' experience in the same building.
2. Ten probationary secondary school teachers. These were defined as high school teachers

¹⁷Ibid.

TABLE 2 — Summary of Selected Sample Data Compared with State of Ohio Data

	Enrollment Size ^a		Location ^b		Student Body		Support	
	Large	Small	Urban	Non-Urban	Co-Educational	Non-Co-Educational	Public	Non-Public
State	14	38	22	30	42	10	12	40
Sample	4	4	3	5	7	1	2	6

^a Large institutions had enrollments exceeding 5,704 students. Small institutions had enrollments lower than that amount, the mean for all Ohio institutions.

^b Urban institutions were located in or near the metropolitan areas of Akron-Canton, Cincinnati, Cleveland, Dayton, Toledo, and Youngstown.

with fewer than three years experience in the same building. (It was requested that the teachers represent a variety of subject areas, such as English, foreign languages, mathematics, science, and social science.)

3. Ten eleventh or twelfth-grade high school students. These were defined as any full-time high school student in the grades indicated and who had evidenced some interest in teaching. Membership in Future Teachers of America or plans to enter a teacher education program in college were examples of evidence.
4. Five high school administrators. These were defined as high school principals or assistants, district directors of secondary curriculum, or other professionals who normally have close contact with teachers and the daily operation of the high schools.

How the Institutions Were Involved

The liaison persons were further requested to identify:

1. Ten secondary preservice students who had not completed their student teaching assignments.
2. Ten secondary preservice students who had completed their student teaching assignments.

The preservice students were to represent a variety of subject areas, such as science, mathematics, English, and occupational education. The actual number of students invited to participate was left to the liaison person; however, no more than thirty and no fewer than ten students were sought from each institution.

The liaison persons were instructed to invite at least nine professors from their institutions to respond to the TEAS (Form CP). These professors were to be selected to represent the institution's college of liberal arts, the college or department of education, and dual appointments. The actual number of professors invited was left to the liaison persons. In some of the small institutions there were fewer than nine professors available from the three areas mentioned.

Assumptions About the Sample

Several assumptions had to be made about the people who were asked to respond to the TEAS. The college professors were asked to respond for two reasons. First, because they were in a good position to know what was happening in the teacher education programs being conducted at their institutions. Second, because college professors can be important sources for valuable suggestions about what should be included in such programs. Professors' descriptions of institutional activities were assumed to be reasonable approximations of what was actually occurring. Their opinions were not considered representative of official institutional points of view, philosophy, or policies. Taken together, all professors' opinion responses, from all of the institutions in the sample, were assumed to comprise a faculty profile of what they believed should be happening in teacher education in Ohio.

Similar assumptions were made for the teachers and administrators in the sample. Their descriptive responses regarding continuing education and differentiated staffing were assumed to be indicative of what was occurring in their respective schools. Responses about what teacher education should include were not assumed to represent any official institutional philosophy or policy. Taken together, however, their opinions were regarded as the practitioner's viewpoint about what teacher education should be.

High school and college students were asked to indicate what they thought about various aspects of teacher education. All of their responses were opinions rather than descriptions of teacher education. Their responses were not assumed to represent any official institutional philosophy or policy. The students' responses, when taken together, were considered to represent the students' attitudes toward what Ohio teacher education should be.

What the Sample Finally Looked Like

Each institution in the sample returned a completed ISD.

Part II of the Instrument, the TEAS, was administered to 510 persons, including 70 college professors, 160 college students, 80 high school students, 40 high school principals and administrators, and 160 high school teachers. A total of 298 usable returns were collected by the time the data analysis began in June, 1970. These returns included responses from 115 teachers and administrators, 141 high school and college students, and 42 college professors. In comparison with what was expected, returns were received from 57 percent of the teachers and administrators, 59 percent of the students, and 60 percent of the professors, or a total return of more than 58 percent. More returns would have been welcome, but it is believed that the situations of spring, 1970, inhibited many returns. Some of these situations included campus riots, early college closings, a U.S. mail strike, public school closings, and Spring and Easter vacation periods. A summary of the number of responses from each institution and from the schools in those areas is shown in Table 3.

How the Instrument Was Administered

Part I, the ISD, was distributed to each of the college liaison people. They were asked to arrange for its completion and return.

Three forms of Part II, the TEAS, were constructed, Form CP for college professors, Form TA for teachers and administrators, and Form S for students.

Forms CP and TA each had two sections. The items in Section 1 were stated as positive value judgments; e.g., "Differentiated staffing can create more jobs for the economically poor." The items in Section 2 were statements about activities which may or may not be happening at the respondents' institutions; e.g., "We have a placement service."

Section 1 items were attitudinal, and for Form CP it included items 1-31. In Form TA, Section 1 covered items 1-195, inclusive. Section 2 items were regarded as descriptive-attitudinal. Section 2 of Form CP covered items 32-232, inclusive; and for Form TA, items 196-232. Items 32-196, inclusive, were descriptive-attitudinal for college professors and attitudinal for teachers and administrators. Form S had only attitudinal items of the Section 1 type.

TABLE 3 — Number of Persons Returning Useable Responses to the TEAS, by Institutional Area

Institution	Teachers		Administrators	Students			College Professors		
	Tenure	Non-Tenure		High School	College STC	College NST	Liberal Arts	Education	Both
1	5	4	4	7	5	5	2	2	2
2	8	10	3	7	6	11		4	4
3	2	4	2	4	3	4			1
4	2	3	1	2	6	6		2	1
5	6	3	1	4	5	7		5	
6	6	5	3	8	2	2			
7	7	8	3	7	10	11	2	8	2
8	11	8	6	7	5	7	2	3	2
Total	47	45	23	46	42	53	6	24	12

All items in each form of the TEAS had parallel construction, that is, same-numbered items referred to the same teacher education activity. Each respondent received a covering letter explaining the TEAP and TEAS, a copy of the TEAS, an answer booklet, and a self-addressed, stamped envelope in which to return his answer booklet.¹⁸

How the College Professors Were Asked to Respond

Section 1. The professors were asked to indicate in their answer booklets whether they agreed or disagreed with each item as stated. The extent of their agreement was to be shown by placing an X in a space along a five-point scale ranging from Strongly Agree to Strongly Disagree. If they chose, they could qualify any of the items by writing their qualifications or comments in the answer booklet.

Section 2. This section had four major response categories. These categories were necessary to determine if an activity or condition existed at this institution (descriptive); and if it did, when it occurred during the preservice program. The third category asked if the activity or condition should exist, and if yes, when it should (attitudinal). The items in this section could be qualified as described for Section 1. The specific directions for responding to Form CP are shown in Appendix III.

The professors were also asked to indicate their years' experience in teacher education, and their major instructional area: education, liberal arts, or both.

How the Teachers and Administrators Were Asked to Respond

Section 1. The first seventy-seven items in this section were responded to in the same way described for the college professors. Items 78 through 163, inclusive, requested the respondent to indicate further, if he agreed with the

¹⁸See the Appendix for a sample copy of the letters, the Forms of the TEAS, and the answer booklets.

item, when he felt the stated activity should occur. All items in Sections 1 and 2 could be qualified as described for the professors.

Section 2. This section had two major response categories. These categories were necessary to determine the respondents' attitudes toward existing activities.

The teachers and administrators were also asked to provide demographic data, including their present position, subject area (if a teacher), and tenure status.

How the College and High School Students Were Asked to Respond

All items in this form were attitudinal. The instructions for responding were the same as for those described for the college professors, Section 1, above.

The students were also asked to indicate their grade level or college class, their subject major, and, for college students, whether they had completed their student teaching assignments.

The TEAS was administered during the winter and spring terms of the 1969-1970 school year. All answer booklets were coded for institutional affiliation. This coding was used on each form so that schools affiliated with institutions could be later identified. For ease in form identification, each was color-coded. Form CP was white, TA blue, and S was yellow. As the answer booklets were received, the responses were recorded on data processing cards. All comments were recorded verbatim and filed.

How the TEAS Was Validated

Instruments can be validated in several ways. Which method to use depends upon the type of validity desired, the kinds of data available, and the investigative context in which the instrument is used.

Measurements of predictive and concurrent validity were considered un-

necessary for the TEAS.¹⁹ This was because the instrument was not designed to be used as a measure of predictability, nor was it expected to be used in correlation with another instrument. Attempts were made, however, to develop some measures of content and construct validity.

The concept of content validity, as used in connection with the TEAS, refers to the degree to which the items in it reflect the teacher education parameters comprising it. A jury validation was conducted to get an estimate of content validity. The members of the jury included persons on the Project Advisory Panel and the Project Consultants.²⁰

Each jury member was given eighteen packets of cards, one for each of the seventeen parameters and one "general" packet. The first card in each packet defined the parameter represented. Other cards in the packet each had a different TEAS item printed on them. A few blank cards were also included. The jurors were instructed to read each item and to decide whether the items could be included in their conceptual framework for each parameter. For example, the parameter packet "Student Teaching" contained fourteen cards, each card representing one item.²¹ As each item was read, the juror decided if it belonged in that parameter. Those items that did not belong were put in the appropriate parameters. Those items that could not be associated with any parameter were either deleted or used to create a new parameter. The TEAS items presented earlier represent the results of this procedure.

The TEAS was based upon seventeen parameters of teacher education identified from the research and literature. Since each item related to one of the seventeen parameters, moderate to high content validity was assumed for the TEAS.

¹⁹ These types of validity are more typically associated with aptitude and achievement measures.

²⁰ The Preface of the present report lists these persons.

²¹ A list of the items presented in Parameter 12, Student Teaching, is shown on pp. 77 - 78, supra.

Some Assumptions for Construct Validity

To ask what psychological factors were involved in any of the responses to the TEAS is to ask the major concern of construct validity.²² If it can be expected that students, teachers, principals, and professors will respond differently, this would suggest that their value-systems concerning teacher education would be different. These differences could be influenced by such factors as background of experiences, age, and sex. Other factors such as psychological stress and physiological condition could also influence how persons respond; however, good psychological and physical health were assumed.

Another assumption was that the responses to the TEAS would vary according to certain situational factors as perceived by the different groups of respondents. That is, because of the location, status, job responsibilities, and other factors connected with the situations of each group, the responses will be different.²³ If this assumption was not made, then it would be expected that professors responses would be no different from students' responses.

How the Data Were Analyzed

Several different sources of data were identified for the TEAP:

1. Available research and literature on teacher education
2. College and university materials, including catalogues, bulletins, and brochures describing their preservice education programs
3. School materials describing continuing education programs and differentiated staffing approaches
4. Suggestions and recommendations made by the

²²Lee J. Cronbach, Essentials of Psychological Testing (New York: Harper, 1960), p. 104.

²³Cf.: Saul B. Sells, Stimulus Determinants of Behavior (New York: The Ronald Press, 1963), especially Chapters I and II.

members of the Project Advisory Panel

5. Interviews and meeting records resulting from conferences with consultants and with various officials from the colleges and universities, the schools, and the State of Ohio Department of Education
6. First-hand observation at colleges and schools
7. Responses to the ISD from the teacher training institutions
8. Responses to the TEAS from:
 - (a) college professors
 - (b) teachers and administrators
 - (c) college and high school students

The printed materials were analyzed according to the method described in the section How the Literature Search Was Conducted. College materials were summarized as descriptions of each of the teacher education parameters. For example, the college publications from the sample institutions were examined to determine philosophy, standards, requirements, and other informative details regarding their respective liberal arts programs for trainees. This information was added to their responses to the ISD plus information gained from other sources.

The objective responses to the TEAS were tabulated on electronic data processing cards. Written item qualifications were tabulated on a special card-file system set up for that purpose. The computations performed included:

1. A Chi-square test to determine significant differences within institutions regarding professors' responses describing certain teacher education activities
2. A Chi-square test to determine significant differences of attitudes among professors, both within and between institutions
3. A Chi-square test to determine significant differences within institution-affiliated schools regarding

teachers' and administrators' responses describing certain teacher education activities

4. A Chi-square test to determine significant differences of attitudes among teachers and administrators, both within and between institution-affiliated schools
5. A Chi-square test to determine significant differences of attitude among college and high school students, both within and between institutions and institution-affiliated schools
6. Yates' correction applied to offset small sample bias²⁴
7. A frequency count of the number of persons responding to each item

The results of these analyses were recorded on a special set of matrix cards. There was a separate matrix card for each item. The cards were organized into parameter packets. Each card contained a matrix on which could be recorded the following data for each institution and institution-affiliated school in the sample:

1. The number of the item
2. The results of the Chi-square analysis for each institution and for the total sample
3. The institutional identification

Each matrix card was also used to determine an adjusted total sample score. This adjustment was necessary because the number of respondents from each institution was unequal. This inequality was considered in the statistical computations within institutions but not between institutions for the total sample. Figure 3 shows a sample matrix card for Item 62, "The secondary teacher preparation program should move from text-book type learning to first-hand, or actual experiences."

²⁴Helen M. Walker and Joseph Lev, Statistical Inference (New York: Holt, Rinehart and Winston, 1953), pp. 105-108.

Figure 3. — Sample Matrix Card—TEAS

		FORM		
Institution		CP	T	S
No.				
1			Y	Y
2				Y
3		N-N	Y	
4		Y-Y	Y	Y
5		Y	Y	Y
6			Y	
7		Y	Y	Y
8		Y	Y	Y
9		Y	Y	Y
10		Y	Y	Y

This card shows that the college professors at sample institution 3 indicated that the condition described in Item 62 does not exist at that institution, and that it should not exist there. This is shown as "N-N" under the CP column next to Institution #3. The first letter is the descriptive response (N = No; Y = Yes), and the second letter is the attitudinal response. The teachers and administrators in the institution-affiliated school #3 showed that they think it should be happening (attitudinal), according to the results of the Chi-square analysis. The responses of the student group were not significantly different, which is why the space in the Institution #3 row is empty. Inspection of Figure 3 reveals that the professors at Institutions #4, 5, 7, and 8 indicated that the described condition existed at their respective institutions. Further, the professors at Institution #4 significantly agreed that the condition should exist. At Institutions #5, 7, and 8 no significant attitudinal agreement could be reached. This is shown by the absence of second "Y" entries in that column for those institutions.

Row 9 in Figure 3 shows the computed total sample response; that is,

everyone in a given group taken together. For example, there was significant agreement among all professors who responded that the item described an existing condition. Further, there was not enough agreement among their attitudinal responses to make a significant difference as to whether it should be descriptive of an existing condition, otherwise there would be two Y's in row 9 under CP.

Inspection of Table 3 shows that only one Form CP was returned from Institution 3. That was because the professors comprising the department of education at that institution collaborated on the completion of a single form. Although the number of respondents from that institution is low, it reflects the teacher education activities there because all the professors concerned with that program were involved. There were twelve Form CP's returned from Institution 7. This could have resulted in an imbalance, since the total sample analyses would give improper weight to the institutions with larger returns. Some may feel it should be this way—larger institutions have larger faculties and therefore, should have more to say about what should happen in teacher education. This may be true, and was taken into consideration as the suggested alternatives in teacher education programs were developed. But in an effort to determine what is happening in Ohio teacher education from a state-wide perspective, each institution had to be regarded as one institution, to be considered with equal deference to other institutions in the sample. This meant that the institutions were regarded as one sample of eight.

Row 10 in Figure 3 is the descriptive-attitudinal decision reached for the total sample of eight institutions. These decisions were made according to a predetermined scoring method: if four or more institutions indicated a "Yes" on the same matrix card, a "Yes" was recorded in Row 10. For example, Figure 3 shows that the students in five institutional areas agreed with Item 62, so a Y(es) was recorded in that column in Row 10. The total student sample showed that a significant majority of them agreed. The matrix card indicates that among the professors in the institutions in the sample, Item 62 describes an activity occurring in four of them, so a "Y" was placed in Row 10 in that column. An entry in Row 10 meant that according to the people affiliated with the institutions in the sample, an activity was or was not occurring. According to Row 10 in Figure 3, Item 62 is descriptive of an activity currently happening in a majority of the teacher education institutions in the sample, and according to the teachers, administrators, and students in the sample, it should be happening. These data were used in presenting the findings in Chapter IV.

Another decision that had to be made was whether or not to include a given TEAS item in the recommendations for alternatives in teacher education. To help with that determination, a scoring key was made. It is shown in Figure 4

and is used in conjunction with Row 10 on the matrix card.

Figure 4. — Decision-Making
Scoring Key for TEAS Items

Yes	No	Blank	Decide
3	0	0	Yes
2	1	0	Yes
2	0	1	Yes
1	1	1	?
1	0	2	?
1	2	0	No
0	3	0	No
0	2	1	No
0	1	2	?
0	0	3	?

Inspection of Figure 4 shows that if there are three Yes's across Row 10 on the matrix card, then the item was to be included in the recommended alternatives. This is shown as a "Yes" in the "Decide" column. Note that there are four rows ending with "?". This means there was not enough evidence to make a decision. In those circumstances, members of the Advisory Panel and the Project Consultants were asked and a decision was reached. The results of this decision-making process were used in establishing the models described in Chapter VI.

Limitations of the Teacher Education Assessment Project

1. The present report makes no attempt to evaluate any program of teacher education in the sample. Decisions regarding the proposed recommendations for alternative models were based on current thinking and research, and on judgments made by professors, teachers, administrators, students and others concerned with teacher education.

2. Even though the sample may be statistically representative of the state, the results of the assessment are limited to those institutions and institution-affiliated schools represented according to the criteria for sample selection.

3. The assessment of teacher education programs has been generally limited to the secondary school level. In some cases certain findings were appropriate for both the elementary as well as the secondary level.

4. The assessments of preservice education as reported in this study have been confined to the undergraduate level. Graduate programs such as the Master of Arts in Teaching or Intensive Teacher Training Programs have been included only when such programs are specifically related to undergraduate activities.

5. This report is intended as a guide for further discussion and research. The suggested alternatives were not intended as comprehensive program descriptions, but as theoretical constructs for improvement.

CHAPTER IV

AN ASSESSMENT OF TEACHER EDUCATION IN OHIO

I seemed to have lost all soul or sensation for this one pursuit. It was indeed but a passing trance that made one feel with renewed acuteness so soon as, the unnatural stimulus ceasing to operate I had returned to my old habits. I collected bones from charnel-houses; and disturbed with profane fingers, the tremendous secrets of the human frame. In a solitary chamber, or rather cell, at the top of the house, and separated from all other apartments by a gallery and staircase, I kept my workshop of filthy creation: my eye-balls were staring from their sockets in attending to the details of my employment. The dissecting room and the slaughter-house furnished many of my materials; and often did my human nature turn with loathing from my occupation, whilst, still urged on by an eagerness which perpetually increased, I brought my work near to a conclusion.

— Mary Shelly, *Frankenstein*

In this chapter the results of the assessment will be presented. Section 1 offers a paradigm for teacher education as suggested by the research and literature. Section 2 gives the results of the data analysis of the TEAS. Section 3 summarizes the major findings of the TEAS. Section 4 includes the descriptions of eight secondary teacher preparation programs as conducted at each sample institution, according to their published information. Section 5 summarizes the major features of secondary preservice education as currently implemented in the sample institutions.

Section 1. The Literary View:
Aspects of Teacher Education

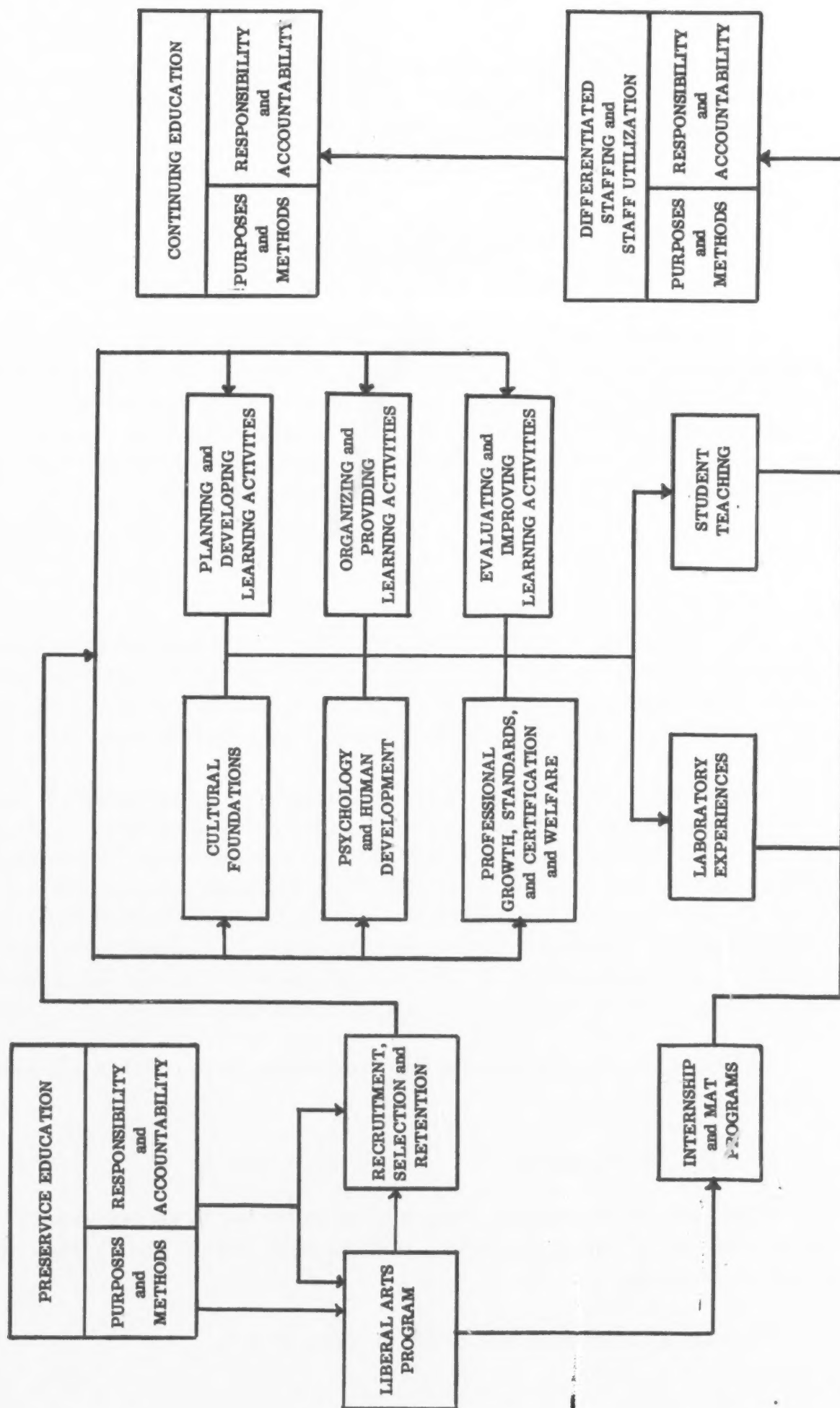
It was mentioned in Chapter III that the research and literature provided the data base for identifying seventeen parameters comprising the Teacher Education Assessment Survey. The number of books and articles in each parameter varied. These parameters were viewed as parts of a puzzle with irregularly sized pieces that could be arranged into some sequence or paradigm. Figure 5 illustrates one such paradigm. The parameters in the preservice education area made up several groups or "blocks." The first block contains two parameters: Purposes and Methods of Preservice Education and Responsibility and Accountability for Preservice Education. This block provides the theoretical, philosophical, and resource bases for secondary school teacher preparation. From here are derived three professional routes. The first is through the Liberal Arts Program followed by an Internship-MAT Program. The second is via the Liberal Arts Program followed by an undergraduate professional education sequence beginning with recruitment and selection. The third route is via simultaneous or dual enrollment in Liberal Arts and professional education.

The next block is the professional education sequence. It consists of nine parameters and begins with Recruitment, Selection, and Retention. Three parameters are noninstruction-oriented; Cultural Foundations; Psychology and Human Development; and Professional Growth, Standards, and Certification and Welfare. These parameters are noninstruction-oriented because they are indirectly related to actual classroom activities. The remaining five parameters are instruction-oriented. They are more directly related to classroom teaching and learning. These parameters include Planning and Developing Learning Activities, Organizing and Providing Learning Activities, Evaluating and Improving Learning Activities, Student Teaching, and Laboratory Experiences. The sequence of the noninstruction and instruction-oriented learning parameters may not be critical; however, the latter two parameters typically serve as capstone experiences at the end of this block.

The research articles and literature in the next block dealt with differentiated staffing. The location of this block in the paradigm is not meant to imply a level of importance or priority, only that it is an integral part of teacher education.

The continuing education block constitutes the last part of the paradigm. As in the differentiated staffing block, two parameters were identified: Purposes and Methods of Continuing Education, and Responsibility and Accountability for Continuing Education.

Figure 5. - A PARADIGM FOR THE DEVELOPMENT
OF AN INSTRUMENT
TO ASSESS THE STATUS OF TEACHER EDUCATION IN OHIO



This paradigm could be considered as a schematic representation of the components of teacher education. It may also constitute the minimal ingredients necessary for models in teacher education.

Section 2. Results of the Teacher Education Assessment Survey

In this section will be presented the responses of the professors, the teachers and administrators, and the students to the TEAS. The section has been organized according to the parameters discussed in Chapter III.¹ Qualified responses and significant comments made by respondents have been included. Except where noted otherwise, all comments have been presented verbatim and were selected as illustrative of certain group reactions.

Purposes and Methods of Preservice Education

This parameter concerned the general goals, aims and objectives of preservice education and their implementation. The topics covered by the eighteen items in this parameter included scope and sequence, program emphasis, and the general philosophy of secondary teacher preparation programs.

According to the responses of the College Professor group,² the secondary teacher preparation programs in the sample institutions tended to move from vicarious to first-hand experiences (62)³ and reflected the increasing variety of roles teachers are required to fulfill (73). All three groups felt that both situations should continue, but professors were not significantly agreed about the latter situation. Students commented that first-hand classroom experiences should be provided sooner for trainees and that they should be trained to perform all the tasks of teaching, regardless of complexity.

The liberal arts programs comprised about 50 percent of all course work

¹See pp. 61-64, supra.

²The College Professor group will be referred to as professors, the Teacher-Administrator group as teachers, and the High School and College Student group as students.

³Numbers in parentheses refer to TEAS items.

required for the Bachelor's degree (76), and generally preceeded the professional education sequence (74). Students agreed with the latter pattern. Although the teachers were not significantly agreed in either of these items, one teacher suggested that the liberal arts and professional education courses be "mixed...to avoid narrow limits." Another teacher suggested that the liberal arts make up "about three-fourths of the program."

Programmed learning was not generally used as a teaching method in pre-service programs (69), and college courses were not regarded as instructional models for how students were expected to teach in the field (70). Professors' comments, such as "The entire faculty should be available for cooperation if the case is warranted BUT it does not seem practical to me to demand such response on a continuing basis," suggest that such an expectation is not feasible. Student comments revealed more concern about individualizing instruction to meet their needs rather than performing as a model for future teaching. Institutions did not generally require all students to follow the same preservice sequence (32). Professors and students felt it should be that way. One college student suggested that the trainee should "be responsible for planning and directing his own education."

The professors agreed that the institutions generally did not and should not regard the major subject field as the most important ingredient in the preservice program (51). They felt similarly about reducing the number of professional education courses (35). One professor indicated that some reduction was occurring at his institution, "but not hours" of credit.

The professors indicated that preservice programs did not favor an international perspective over a national one (71); and that the educational philosophies upon which these programs are based were not usually developed by both students and faculty (33).

Teachers and students agreed that the liberal arts program should serve as the basis for selecting the major subject field (77). They felt the professional sequence should provide for individual differences in student ability (37), and that it ought to be based on the current learning problems of high school students (34). One teacher commented that "learning problems differ with the daily and yearly problems of the world. Teacher training must be general enough to allow trainees to be able to cope with many problems."

There were no items in which the students alone had significant attitudes; among the teachers, however, there were two. They felt that preservice should provide a strong major subject field and a concentration in a related minor (53); for example, a major in biology and a minor in botany for a biology

teacher. Although the professor data were not significant on this item, one professor remarked, "we have a strong concentration in an academic area and do not encourage minors." The teachers significantly agreed that professional education courses should have behavioral objectives (36). Professors were not significantly agreed on this item. Perhaps the reason is implied in one professor's comment, "I question whether ALL objectives can be stated or identified behaviorally. Life is not that absolute."

A summary of how each group responded is shown in Table 4.

The first column in the table indicates the items in the TEAS that were included in this parameter. The responses of each group are shown in three columns, College Professors (CP), Teachers and Administrators (TA), and High School and College Students (S), respectively. When the respondents within a group significantly agreed with each other and with the item, a Y(es) was entered in the table. When they agreed with each other, but not with the item, a N(o) was entered. When there are two hyphenated symbols, as in the CP column, the first indicates the descriptive agreement and the second the attitudinal agreement. For example, the responses for Item 73 are shown by looking across the row adjacent to that item in the table. The professors significantly agreed that Item 73 is descriptive of a situation at their respective institutions; however, no significant agreement was reached as to whether this situation should be occurring. This is indicated as "Y-?". Both teachers and students agreed that the situation should be descriptive. When there is only one symbol, it is attitudinal.

Inspection of the table reveals that only Item 62, discussed earlier, describes an existing condition that all three groups agreed should be happening. There were no items in this parameter with which groups felt opposed to one another. In only two items, 41 and 52, was there lack of significant agreement in any of the three groups.

Responsibility and Accountability for Preservice Education

This parameter concerns how different agencies in the state affect secondary teacher preparation programs. It includes selected roles of the institution, of the State Department of Education, of the schools, and of various educational associations and organizations.

Professors' responses indicated that teacher organizations, such as the

TABLE 4 — Summary of Responses to the TEAS for the Parameter
"Purposes and Methods of Preservice Education"

Item Number	Description	Response Group ^a		
		CP (N=42)	TA (N=115)	S (N=141)
32	All secondary teachers-in-training should follow the same preparation program sequence	N-N	?	N
33	The teacher preparation program should be based on a written foundation of educational philosophy developed by students and faculty	N-?	?	?
34	The teacher preparation program should be based on the current learning problems of secondary school students	?-?	Y	Y
35	Teacher preparation institutions should plan to substantially reduce the number of professional education courses	N-N	?	?
36	Professional education courses should have carefully defined behavioral objectives, that is, definite skills that students should have when they finish the courses	?-?	Y	?
37	The professional sequence should provide for individual differences in student ability	?-?	Y	Y
41	Teacher preparation programs should strongly encourage all students to begin their training program at the same time	?-?	?	?
51	The academic discipline, that is, the subject someone plans to teach, should be considered the most important ingredient in secondary teacher preparation	N-N	?	?
52	The major difference between elementary and secondary teacher preparation is that the latter should have more emphasis in an academic discipline	?-?	?	?
53	The secondary teacher preparation program should provide a broad background in the major academic discipline (subject area,			

TABLE 4 — Continued

Item Number	Description	Response Group ^a		
		CP (N=42)	TA (N=115)	S (N=141)
62	e.g., biology) with a strong concentration in a minor discipline (e.g., botony)	?-?	Y	?
69	The secondary teacher preparation program should move from text-book type learning to first-hand, or actual experiences	Y-Y	Y	Y
70	Secondary teachers-in-training should be taught mostly via programmed learning, a form of instruction paced by the learner	N-N	N	?
71	For the most part, secondary teachers-in-training should be taught by the entire university faculty according to how they would be expected to teach; i.e., according to the methods they are expected to use	N-N	?	?
73	Secondary teacher preparation programs should stress an international rather than national perspective	N-?	?	?
74	The secondary teacher preparation program should reflect the increasing variety of jobs a teacher must do	Y-?	Y	Y
76	The liberal arts or general education program should precede the professional training program	Y-?	?	Y
77	The liberal arts or general education program for secondary teachers-in-training should constitute about half of the course work required for the Bachelor's degree	Y-?	?	?
	The liberal arts program should provide college students with the basis for selecting the subject field they intend to teach	?-?	Y	Y

^aCP = College Professors; TA = Teachers and Administrators; S = Students

Ohio Education Association, or the American Federation of Teachers are not the group responsible for setting up professional sequences in preservice education (63). There were no significant findings in any of the three groups regarding whether such organizations should do this. One teacher remarked that the "key word is 'mainly'—some other areas also have a say." What "other" areas meant was not indicated. One high school student commented, "these groups have not demonstrated any competence to me [to justify] the place of dictatorship which they seem to feel they should have."

Professors significantly agreed that they kept up with daily problems, policies, and procedures of the public schools (67, 68). Both the teacher group and the student group agreed that professors ought to do this. All three groups agreed that the institutions ought to have some established means for keeping the contents of their preservice programs up-to-date (60); but the data did not show that this was standard current practice. One professor pointed out that this was done at his institution every two years.

Professors and teachers felt that the secondary preservice education should not be under the major influence of the liberal arts scholars (66). One teacher pointed out that "liberal arts scholars...should not be divorced from those who are being trained to teach the academic subjects. This is their responsibility, too, and they have turned away from it."

The item "Should the teacher preparation program be left to the university department of education?" (65) brought a significant "no" from the teachers, but not from the other groups. Teachers' comments suggested that the schools, the organizations, and the students ought to participate in planning and implementing the preservice program. Two professors indicated that the State Department of Education needs to be brought in, too.

Table 5 summarizes these findings. Only Item 60 was considered desirable by all three groups. Items 67 and 68 were the only two described as currently happening and agreed upon as desirable by both teachers and students. There were two items for which no significant data were found, 54 and 64.

The Liberal Arts Program

This parameter concerns the kinds of general knowledge pursued in preservice education. All three groups agreed that the liberal arts program should include study in the humanities (81) and behavioral science (78). Courses in these areas could include literature, fine arts, philosophy, and

TABLE 5 — Summary of Responses to the TEAS for the Parameter
"Responsibility and Accountability for Preservice Education"

Item Number	Description	Response Group		
		CP (N=42)	TA (N=115)	S (N=141)
54	High school teachers should be specialists in an academic discipline, not generalists	?-?	?	?
60	The universities should have a regular procedure for keeping the contents of their secondary teacher preparation program up-to-date			
63	Teacher training programs for secondary teachers should be set up mainly by teacher organizations, such as the Ohio Education Association, or the American Federation of Teachers	?-Y	Y	Y
64	The professional sequence for the training of secondary teachers should be set up mainly by the Ohio State Department of Education	N-?	?	?
65	Teacher preparation programs are best left to the university's Department of Education	?-?	?	?
66	Secondary teacher preparation programs should be <u>mostly</u> influenced by the liberal arts scholars	?-?	N	?
67	Professors who share in the responsibility for preparing secondary teachers should be familiar with the everyday problems of public schools	?-N	N	?
68	Professors who share in the responsibility for preparing secondary teachers should be familiar with the policies and procedures of the local schools	Y-?	Y	Y
		Y-?	Y	Y

general psychology. Professors indicated that such course work is currently given in their institutions in addition to work in communication skills (86) and in the social sciences (80). Professors were not agreed whether courses in the latter two areas should be required. Teachers and students felt they should be required. Institutions typically require study in the natural sciences (79) and the professors think it should be that way; but neither teachers nor students could significantly agree. Physical education (85) was the only liberal arts requirement that no group could significantly agree on. One professor noted that "certain kinds of activities can be of value." A teacher summed up his feelings with "Useless." Students significantly agreed that study ought to be required in the practical arts and the world of work (84). One student inquired, "The world of work? God! What does this term imply?"

Table 6 summarizes the responses to this parameter. There were two areas not required and which no group could significantly agree on: mathematics (82) and foreign language (83).

Recruitment, Selection, and Retention

The thirteen items in this parameter dealt with the methods used for attracting people into education, the criteria for selecting and admitting people to the teaching field, and how such persons can be retained during preservice.

Two items had "across-the-board" agreement. The first was that preservice programs should not be based on the idea that "anyone who can complete the requirements for the Bachelor's degree can learn to be a teacher" (38). The second endorsed the idea that the academic progress of students in preservice should be reviewed regularly (50). One professor suggested that such review be held annually.

The two most frequent criteria for admission to teacher preparation programs were a "demonstrated ability to work with children" (45) and a "record of high academic achievement in college" (47). The latter criterion brought mixed reactions from each group regarding its desirability. Part of the problem had to do with how high an achievement level should be necessary and how to measure it. One professor suggested that the sophomore year grades be used; another suggested that highly motivated average students should not be omitted. A teacher said that average persons with balanced interests and who relate well with children should not be eliminated from entering the profession. Professors were not significantly agreed about whether demonstrated ability to work with children is a desirable criterion. Teachers and students were significantly in

TABLE 6 -- Summary of Responses to the TEAS for the Parameter
"Liberal Arts Program"

Item Number	Description	Response Group		
		CP (N=42)	TA (N=115)	S (N=141)
	The liberal arts program for high school teachers should include required course work in:			
78	behavioral sciences, e.g., general psychology	Y-Y	Y	Y
79	natural sciences, e.g., zoology, physics, chemistry	Y-Y	?	?
80	social sciences, e.g., history	Y-?	Y	Y
81	humanities, e.g., literature, fine arts, and philosophy	Y-Y	Y	Y
82	mathematics	?-?	?	?
83	foreign language	?-?	?	?
84	practical arts and the world of work	?-?	?	Y
85	physical education	Y-?	?	?
86	communication skills	Y-?	Y	Y

favor of it; however, their comments indicated that the main purpose of teacher education, from their point of view, is to have students learn to do this.⁴ A high school student asked:

Isn't the purpose of training, in part, to develop ability to work with children? If the applicants have the ability to communicate, are emotionally stable and mature, and are committed to teaching to begin with, then a demonstrated ability would be unnecessary....

Teachers and students agreed significantly with the requirements of a demonstrated ability to communicate effectively (43), emotional stability and maturity (46), and evidence of commitment to teaching (48), as criteria for admission to the preservice program. Some students indicated that communication skill development be part of the program rather than a criterion for admission. The professors were not significantly agreed on any of these criteria, perhaps for the reason cited by one who asked, "How do you test commitment before an opportunity is given to try it?"

Students and teachers were agreed that good physical health should be a criterion (45). One teacher said that "one of my best teachers had polio and taught on crutches—depends on what the problem is." The idea of above average intelligence (44) was thought a desirable criterion by teachers; neither professors nor students could agree. As one professor noted, "most college kids are above average in intelligence, anyway."

Professors and teachers were not significantly decided about whether Ohio institutions ought to recruit preservice students primarily from Ohio (39). The students felt they should. The data indicated that it was not a characteristic of the sample institutions. One college student said:

Education students greatly benefit from exchanging experiences and views from all over the country. At [my institution] I've gained a lot from the East (I'm from Chicago).

Another point that students agreed on was that preservice programs should

⁴This purpose has not been made explicit in the teacher education programs described earlier.

not require instruction on how to recruit others into the education profession (92). Teachers and students significantly agreed that the State of Ohio should make loans available for able and needy students who want to be teachers (40). Although the professors were not significantly agreed on this matter, one professor felt that the financial assistance available in Ohio is:

...wholly inadequate. This is a damn disgrace. The financial program is wholly inadequate for many needy students who have excellent potential for becoming teachers and other professionals.

Table 7 summarizes these data. Only one item "Admission to a teacher preparation program should be based on a carefully planned screening procedure, i.e., highly selective" (42) received no significant agreement within any group. A reason for the lack of agreement among professors may have been the variance in perceptions about what "highly selective" meant. Some professors believed that the screening process was selective enough. One teacher suggested a psychological screening. Another offered that "some of the students who struggle to get through college are the ones that make the best teachers." A high school student thought "with the demand for teachers, we can't be as selective as a college of dentistry."

Psychology and Human Development

The fourteen items in this parameter dealt with the kinds of knowledge secondary school teachers need in psychology and human behavior and development. Significant agreement was reached both within and between the teacher and student groups on all items in this parameter, the only parameter in which this phenomenon occurred.

Significant data revealed that the institutions provided instruction in the principles and practices of adolescent psychology (96, 97), of human growth and development (122, 123), and of theories of learning (140, 141). College students were the only ones who commented on these items. The substance of their remarks was that there should be more practice and less theory.

The institutions provided instruction in the principles and practices of educational psychology (120, 121). Professors were not significantly agreed about the desirability of such instruction.

TABLE 7 -- Summary of Responses to the TEAS for the Parameter
"Recruitment, Selection, and Retention"

Item Number	Description	Response Group		
		CP (N=42)	TA (N=115)	S (N=141)
38	Teacher preparation programs should be based on the concept that anyone who can complete the requirements for a Bachelor's degree can learn to be a teacher Ohio colleges should recruit students in teacher education primarily from Ohio The State of Ohio should make financial loans available for able and needy students who wish to become teachers Admission to a teacher preparation program should be based on a carefully planned screening procedure, i.e., highly selective Criteria for admission to a teacher preparation program should include: demonstrated ability to communicate effectively above average intelligence good physical health emotional stability and maturity record of high academic achievement in college evidence of commitment to teaching demonstrated ability to work with children The academic progress of students enrolled in the teacher preparation program should be reviewed regularly All secondary teachers-in-training should receive instruction in how to recruit others into the education profession	N-N	N	N
39		?-?	?	N
40		?-?	Y	Y
42		?-?	?	?
43		?-?	Y	Y
44		?-?	Y	?
45		?-?	Y	Y
46		N-?	?	?
47		?-?	Y	Y
48		N-?	Y	Y
49		Y-Y	Y	Y
50		?	?	N
92		?	?	N

The data were not significant enough to determine whether professors believed it desirable to provide, or if instruction was provided in theory and practice of guidance and counseling (107, 108). One teacher said "ordinary teachers need not take advanced guidance courses at the expense of their own discipline." Teacher and students indicated it should be provided. They revealed that other areas of instruction, not usually provided in preparation programs, ought to be made available. These included how to help high school students adapt to their community (101), to build constructive value systems for themselves (118), and to develop leadership skills (137). One teacher commented:

Who can decide what are constructive value systems for someone else? I think it would be great if you could teach someone how to do this.

A college student asked:

Do you really think it is possible to (a) teach people to guide youth in this manner? (b) to actually guide youth in this manner? So much of our training is already too idealistic.

Another college student said:

I wish there were [a way to more strongly agree]. In student teaching at a...white, middleclass (blue collar) school, I have been amazed and depressed at the lack of value systems in high school juniors. If parents fail here, schools should provide at least the opportunity and encouragement to develop higher values.

Closely associated with these views was the item about whether teachers get or need instruction in how to demonstrate respect for secondary school students (104). One teacher said, "I don't think respect for someone can be taught. If a person has good courses in educational psychology or psychology, he will be aware of how important it is."

Table 8 summarizes the data for the parameter.

TABLE 8 — Summary of Responses to the TEAS for the Parameter
"Psychology and Human Development"

Item Number	Description	Response Group		
		CP (N=42)	TA (N=115)	S (N=141)
	All secondary teachers-in-training should receive instruction in:			
96	the principles of adolescent psychology	Y-Y	Y	Y
97	how to apply the principles of adolescent psychology in the classroom	Y-Y	Y	Y
101	how to help high school students adapt to their community	?-?	Y	Y
104	how to demonstrate respect for secondary school students	?-?	Y	Y
107	the principles of guidance and counseling	?-?	Y	Y
108	how to apply the principles of guidance and counseling	?-?	Y	Y
118	how to help youth build constructive value systems for themselves	?-?	Y	Y
120	general educational psychology	Y-?	Y	Y
121	how to apply the principles of educational psychology	Y-?	Y	Y
122	the principles of human growth and development	Y-Y	Y	Y

TABLE 8 - Continued

Item Number	Description	Response Group		
		CP (N=42)	TA (N=115)	S (N=141)
123	All secondary teachers-in-training should receive instruction in: how to apply the principles of human growth and development	Y-Y	Y	Y
137	how to develop leadership skills in secondary school students	?-?	Y	Y
140	theories of learning	Y-Y	Y	Y
141	how to apply the theories of learning to what happens in the classroom	Y-Y	Y	Y

Cultural Foundations

The eighteen items in this parameter were concerned with the kinds of knowledge secondary school teachers need relative to those concepts founded in the history, sociology, and philosophy of American education.

Professors' responses revealed two items as descriptive of current practices in the sample institutions. One, that preservice education include training in how to decide what is important to teach and what is not (131), was thought to be desirable among all three groups. The other, that trainees should receive instruction in contemporary issues in education (98), was agreed to by both teachers and students, but not significantly among professors. Individuals from all three groups questioned whether these things can be taught.

Teachers and students agreed that preservice programs should include instruction in the principles and practices of social psychology (109, 110) and educational philosophy (111, 112) even though such instruction is not generally provided. There were similar findings regarding instruction in school-community relations (132), how to help students become responsible citizens (148), and the principles of educational sociology (115). One teacher suggested that methods of teaching responsible citizenship should be provided in "social living classes," while a college professor said "this is a fine goal—how do you teach it?"

The principles and practices of social philosophy (113, 114) was significantly agreed on as being an important part of the preservice program by students, but not by teachers or professors. The same situation was found regarding instruction in how to apply the principles of educational sociology (116), and in how to use, conceptualize, and synthesize knowledge (144).

These data are summarized in Table 9. Five items, 94, 95, 100, 119, and 145, had no significant agreement within any group. These items had to do with instruction in educational finance, organization and administration, urban sociology and psychology, and the history of education.

Professional Standards, Certification, Placement, and Welfare

The eight items in this parameter dealt with the kinds of knowledge teachers need and the roles institutions should have concerning teacher certification, placement, and welfare.

TABLE 9 — Summary of Responses to the TEAS for the Parameter
"Cultural Foundations"

Item Number	Description	Response Group		
		CP (N=42)	TA (N=115)	S (N=141)
	All secondary teachers-in-training should receive instruction in:			
94	the principles of educational finance	?-?	?	?
95	how to use principles of educational finance	?-?	?	?
98	contemporary issues in education	Y-?	Y	Y
100	the organization and administration of American education	?-?	?	?
109	the principles of social psychology	?-?	Y	Y
110	how to apply the principles of social psychology	?-?	Y	Y
111	the principles of educational philosophy	?-?	Y	Y
112	how to apply the principles of educational philosophy	?-?	Y	Y
113	the principles of social philosophy	?-?	?	Y
114	how to apply the principles of social philosophy	?-?	?	Y
115	the principles of educational sociology	?-?	Y	Y

TABLE 9 — Continued

Item Number	Description	Response Group		
		CP (N=42)	TA (N=115)	S (N=141)
	All secondary teachers-in-training should receive instruction in:			
116	how to apply the principles of educational sociology	?-?	?	Y
119	urban sociology and psychology	?-?	?	?
131	how to decide what is important to teach and what is not	Y-Y	Y	Y
132	school-community relations	?-?	Y	Y
144	how to use, conceptualize, and synthesize knowledge	?-?	?	Y
145	the history of education	?-?	?	?
148	how to help students become responsible community citizens	?-?	Y	Y

Every institution in the sample had a placement service. All three groups significantly agreed that they should have them (55). Teachers and students agreed that placement services should be provided only for those students whom the university recommends for certification (59). One principal pointed out that "placement could be broader than educational placement." Whether the university should follow up on students who have been placed was not significant among professors or students (56); but it was significant among teachers. They felt that such followup should occur. One teacher said that followup is "merely a passing fancy," but a professor felt otherwise. He suggested

One letter the first year, others if requested by the teacher to keep up his credentials for the purpose of changing position. It would be better if two times during the first year of teaching, once the second year, and once when the teacher changes positions.

The institutions provided preservice students with instruction in teacher welfare and certification (146). Professors were not significantly agreed on the desirability of this point, but teachers and students were.

Teachers and students significantly disagreed with the idea that teachers should be certified to teach in only one subject area (57). Several college students commented that teachers should be prepared in two or more subjects, e.g., "Teachers should be certified to teach in any area that they have competence in." A teacher summed up the feelings for his group with

I don't think certification should be granted in more than two subjects but I don't think it ought to be limited to one. I enjoy teaching two and feel it impossible to be competent in more than one.

Teachers and students both felt that the preservice program should include instruction in how to develop educational policies (90) and in educational leadership functions (91). The students felt that universities should base their recommendations for certification on performance rather than on accumulated college credits (58). Comments from professors and teachers suggested that recommendation be based on both the academic record and performance. One teacher asked, "What are the performance standards—and who will set them?" It may have been this concern that led one student to remark "awfully impractical."

These data are summarized in Table 10. There were no items in this

TABLE 10 -- Summary of Responses to the TEAS for the Parameter
"Professional Standards, Certification, Placement, and Welfare"

Item Number	Description	Response Group		
		CP (N=42)	TA (N=115)	S (N=141)
55	Universities should have a placement service, or some other agency to help its graduates get a good teaching job	Y-Y	Y	Y
56	The university should follow up on all, or nearly all, students after placement	?-?	Y	?
57	Teachers should be certified to teach in only one subject area, for example English; not English and French	?-?	N	N
58	Universities should base their recommendation for certification on demonstrated performance rather than on the number of college credits a student has	?-?	?	Y
59	Placement services should be provided only for those students whom the university recommends for certification	?-?	?	Y
90	All secondary teachers-in-training should receive instruction in:	?-?	Y	Y
90	how to develop educational policies	?-?	Y	Y
91	educational leadership functions	?-?	Y	Y
146	teacher welfare and certification	Y-?	Y	Y

parameter without at least one group having significant feelings.

Planning and Developing Learning Activities

The twelve items in this parameter dealt with the kinds of knowledge required for secondary school teachers relating to the design and preparation of children's educational experiences. Topics included resources, curricula, and application of theory.

The professors did not significantly agree with any attitudinal dimension in this parameter. Their responses revealed that the institutions provided instruction in theory and practice of secondary education (87, 88), curriculum development (129), how to apply educational theory to the classroom (133), and how to make, select, and use learning materials and equipment (150). Teachers and students were agreed that these things should be taught, with the exception of the use of educational theory on the part of the students. Many students commented on the first four of these instructional areas. A typical comment was "what a waste." One typical teacher comment was:

So many theoretical courses before actual experience are rather meaningless and turn teachers off from pursuing continuing education. Many of these concerns are important but could be done with less repetition. They would be most effective after some teaching experience.

Both teachers and students significantly agreed that trainees should have instruction in how to use the resources of the State Department of Education (99), of research agencies (151), and of the community (134). They agreed that instruction should be given in the principles of secondary curriculum construction (128) and how to develop self-directing sequenced learning materials for independent study (154). One college student suggested that instruction be given in the development of "...non self-directing, non-sequenced learning materials."

These data are summarized in Table 11. There were two items that had no significant agreement within any group. These items dealt with preservice instruction in the theories and applications of programmed learning (125), and how to apply travel experience to the classroom (160).

TABLE 11 - Summary of Responses to the TEAS for the Parameter
"Planning and Developing Learning Activities"

Item Number	Description	Response Group		
		CP (N=42)	TA (N=115)	S (N=141)
	All secondary teachers-in-training should receive instruction in:			
87	the principles of secondary education	Y-?	Y	Y
88	how to apply the principles of secondary education	Y-?	Y	Y
99	how to use the resources of the State Education Department	?-?	Y	Y
125	the theories and applications of programmed learning	?-?	?	?
128	the principles of secondary curriculum construction	?-?	Y	Y
129	how to apply the principles of curriculum development	Y-?	Y	?
133	how to apply educational theory in the classroom	Y-?	Y	Y
134	how to use community welfare and other similar agencies outside the school	?-?	Y	Y
150	how to make, select, and use learning materials and equipment	Y-?	Y	Y
151	how to use the resources of research agencies	?-?	Y	Y

TABLE 11 - Continued

Item Number	Description	Response Group		
		CP (N=42)	TA (N=115)	S (N=141)
154	All secondary teachers-in-training should receive instruction in: how to develop self-directing, sequenced learning materials for independent study how to apply the experiences gained through foreign and domestic travel in the classroom setting	?-?	Y	Y
160				

Organizing and Providing for Learning Activities

There were nineteen items in this parameter. They were concerned with knowledge relating to grouping and arranging for instructional strategies, implementing educational experiences, and the general uses of educational technology. Topics included team teaching, nongradedness, and the use of instructional materials.

Professors' responses revealed that the institutions generally provided instruction in how to meet individual differences by individualizing learning activities (117), how to manage a secondary school classroom (139), how to establish a positive classroom climate (149), and general teaching methods (143). All three groups were significantly agreed that these items should be taught. One item, how to organize a class for effective instruction (93), was agreed upon as being taught in the institutions, but was not agreed upon by the professors as being particularly desirable. A high school student's comment regarding classroom management was:

Teachers spend so much time attempting to do this in the classroom that they fail in everything else. Why is this so important? Can anyone really give me a sound argument? I seriously doubt it."

All three groups felt that the preservice program should include instruction in how to function as a member of a teaching team (103) and how to use instructional materials centers and similar resources (156). The data indicated that such instruction is not generally provided by the institutions.

Teachers and students significantly agreed on many items that were not agreed on by professors as being descriptive, but were felt to be desirable. These included instruction in how to teach large and small groups (102), how to use certain learning resources such as simulation materials (105), how to use themselves as learning resources (106), how to use educational television and computer assisted instruction (136), how to work in a flexible schedule (127), and how to provide learning activities in a nongraded school (126). The development of creativity in themselves and in children was another area they felt should be provided (138, 142). Perhaps these things are not generally taught because, as one student noted, "no one seems to know how to teach this to teachers-in-training."

Professors and students thought the institutions should provide instruction in how to use students as tutors (157). Students thought they ought to be in-

structed in the duties and responsibilities of teacher aides and other paraprofessionals (162), and in how to conduct a self-contained class (147). Teachers felt instruction should be given in how to handle social events (89). Table 12 summarizes these data.

Evaluating and Improving Learning Activities

The eight items in this parameter dealt with the kinds of knowledge teachers require for making and using value judgments in the secondary school. Evaluating pupil progress, determining professional strengths and weaknesses, and maintaining professional skills are included.

The sample institutions generally provided instruction in how to keep up with new curricula and methods (153) and how to evaluate and report student progress (130). All three groups agreed that the latter should occur; professors were not significantly decided on the former.

Teachers and students significantly agreed that trainees should receive instruction in how to plan, participate in, and contribute to continuing education programs (152) and in how to identify their own professional strengths and weaknesses (161). One teacher noted that "The principal should do this." He felt that "to get instruction in these subjects is wasteful of training time. On the job it could be meaningful."

Teachers and students agreed that instruction in how to keep up with educational technology (155) was important for preservice. Students felt they should be instructed in the use of educational research data (124), but no group felt strongly about whether teachers need to learn how to conduct or participate in such research (158) or in accreditation procedures (159). Table 13 summarizes these data for this parameter.

Laboratory Experiences

The ten items in this parameter dealt with the kinds of simulated experiences trainees need for developing special teaching skills. Observing, micro-teaching, and individual tutoring were included.

It was found that professional education courses were not provided exclusively through first-hand learning (61), but such experiences were offered.

TABLE 12 -- Summary of Responses to the TEAS for the Parameter
"Organizing and Providing for Learning Activities"

Item Number	Description	Response Group		
		CP (N=42)	TA (N=115)	S (N=141)
	A. secondary teachers-in-training should receive instruction in:			
89	how to handle social events (extra-curricular activities, chaperoning)	?-?	Y	?
93	how to organize a class for effective instruction	Y-?	Y	Y
102	how to use small and large group instruction effectively	?-?	Y	Y
103	how to function as a member of a teaching team	?-Y	Y	Y
105	how to prepare and use simulation materials	?-?	Y	Y
106	how to use themselves as learning resources for secondary school students	?-?	Y	Y
117	how to meet individual differences by providing meaningful individualized learning activities	Y-Y	Y	Y
126	how to provide learning activities in a non-graded school	?-?	Y	Y
127	how to plan and teach in the framework of a modular or other type of flexible schedule plan	?-?	Y	Y

TABLE 12 - Continued

Item Number	Description	Response Group		
		CP (N=42)	TA (N=115)	S (N=141)
136	All secondary teachers-in-training should receive instruction in: how to use instructional technology, such as educational television and computer-assisted instruction	?-?	Y	Y
138	how to develop a sense of creativity in secondary school students	?-?	Y	Y
139	how to manage a secondary school classroom	Y-Y	Y	Y
142	how to be creative or how to use their own extant creative abilities in the classroom	?-?	Y	Y
143	methods of teaching	Y-Y	Y	Y
147	how to conduct a self-contained class	?-?	?	Y
149	how to establish a positive classroom climate	Y-Y	Y	Y
156	how to use instructional materials centers and similar resources	?-Y	?	Y
157	how to use students as tutors (i.e., one student to give individual help to another student).	?-Y	?	Y

TABLE 12 - Continued

Item Number	Description	Response Group		
		CP (N=42)	TA (N=115)	S (N=141)
162	All secondary teachers-in-training should receive instruction in the duties and responsibilities of teacher aides and other para-professional personnel	?-?	?	Y

TABLE 13 — Summary of Responses to the TEAS for the Parameter
"Evaluating and Improving Learning Activities"

Item Number	Description	Response Group		
		CP (N=42)	TA (N=115)	S (N=141)
124	All secondary teachers-in-training should receive instruction in: using and applying educational research, including statistics	?-?	?	Y
130	how to evaluate and report student progress	Y-Y	Y	Y
152	how to plan, participate in, and contribute to programs in continuing education	?-?	Y	Y
153	how to keep up with new curricula and new methods	Y-?	Y	Y
155	how to keep up with new developments in educational technology	?-?	Y	Y
158	how to conduct and/or participate in cooperative educational research projects	?-?	Y	Y
159	how to participate in an accreditation team such as the National Council for the Accreditation of Teacher Education, of the North Central Association of Colleges and Secondary Schools	?-?	?	?
161	how to identify their own professional strengths and weak- nesses and translate them into behavioral objectives for the future	?-?	?	?

Professors thought it should be that way. Neither teachers nor students could agree. All three groups agreed that laboratory field experiences as currently implemented should be continued (163) and that new ways to provide them should constantly be sought (188). One college student said "I don't think it is possible to teach someone to teach." Responses from teachers and students revealed that laboratory experiences should increase in frequency gradually (189) and should be used in developing self-evaluation skills (193).

Students and teachers significantly agreed that simulation exercises should be a part of preservice education (190), but students commented that such programs can be too unreal. For example, one college student suggested, "They should participate in actual schools and not use the 'I-am-a-teacher-you-are-a-group-of-eighth-graders' technique that is so often used..." Teachers and students agreed that field experiences should involve direct contact with high school students on an individual basis (191). The questions on microteaching (192, 194) lacked significant agreement within all groups, perhaps because, as one teacher admitted, "I've never heard of microteaching."

Awareness training was another area in which no group was significantly agreed (195). Teachers' reactions were negative. One said "too much literature indicates that there might be harmful side-effects from sensitivity training—would want to know more about it." Another said, "Our experience has been that sensitivity sessions have missed the goal completely."

These data are summarized in Table 14.

Student Teaching

The fourteen items in this parameter were concerned with the kinds and amounts of actual teaching experiences preservice students require. The term "student teaching" is synonymous with cadet teaching and practice teaching, and involves supervised classroom teaching experiences.

According to professors' responses, the student teaching programs in the institutions are long enough to allow the development of teacher-role assumption, not teacher-role playing (180), and enable students to get experience in all phases of teachers' work (187). Both teachers and students, but not professors, were significantly agreed that such practices should continue. Only students agreed that student teaching performance should be used as a criterion for retention in the preservice program (183). One teacher suggested that his criterion be applied "...at a point at which the student and university reassess the goals

TABLE 14 — Summary of Responses to the TEAS for the Parameter
"Laboratory Experiences"

Item Number	Description	Response Group		
		CP (N=42)	TA (N=115)	S (N=141)
61	Professional education courses should be provided <u>only</u> via clinical and first-hand laboratory experiences, that is, learning by doing	N-N	?	?
163	Laboratory field experiences, such as observing and teaching a brief lesson in a public school, should be provided as a part of the professional preparation program	Y-Y	Y	Y
188	New forms of practical learning or laboratory experiences need to be developed in the universities; that is, new ways to teach teachers how to teach	Y-Y	Y	Y
189	The amount of student laboratory experiences should increase gradually, beginning at the start of the program	?-?	Y	Y
191	Teachers-in-training should have opportunities to work with secondary school students on an individual basis	?-?	Y	Y
192	Teachers-in-training should participate in microteaching; that is, teach a short lesson to a very small group of high school students and get an immediate evaluation	?-?	?	?
193	Laboratory experiences should be used to help teachers-in-training learn how to evaluate the effects of their teaching	?-?	Y	Y
194	Universities should provide opportunities for microteaching as a team member	?-?	?	?
195	Opportunities should be available for teachers-in-training to participate in awareness training	?-?	?	?

of the student in relation to a teaching area." One college student suggested that the criterion be used to "weed out draft dodgers." Another said that

a weak performance may not necessarily be a student teacher's fault. A performance should be followed by more instruction and another student teaching experience.

This may be a valid point; however, no group was significantly agreed on the item referring to it (175).

Professors' data revealed that the institutions do not generally provide all students with urban teaching experience (186). No group was significantly agreed on the matter. College students suggested that experience be provided in several settings. All three groups felt that student teaching should be long enough to allow for developing individual teaching style (179).

Teachers and students were significantly agreed that preservice courses ought to be revised according to considerations based on feedback from student teachers and cooperating teachers (176). They also agreed that student teachers should participate in group counselling sessions (178), be told—along with their cooperating teachers—what will be their duties and responsibilities (184), and be allowed to exercise individuality in the execution of their assignment (177).

Students were alone in their feeling that team-teaching opportunities should be a part of the student teaching experience (185).

No group was significantly agreed on how cooperating teachers should be selected (181, 182). Students and teachers suggested that both the institution and the school principal should be involved. One teacher suggested that "... the placement official of the university can compare his student teachers' qualifications and characteristics with those given to him by the principal on possible cooperating teachers. Then a favorable match can be made." No group was significantly agreed about whether preservice education should include instruction in how to supervise student teachers (135). Some students supported the idea at the continuing education level; e.g.,

This could and should be available to in-service teachers who are going to have a student teacher; but how silly to give it to a student who may have not even done his own student teaching yet.

Table 15 summarizes these data.

TABLE 15 — Summary of Responses to the TEAS for the Parameter
"Student Teaching"

Item Number	Description	Response Group		
		CP (N=42)	TA (N=115)	S (N=141)
135	All secondary teachers-in-training should receive instruction in how to supervise student teachers (e. g., how to serve as a sponsor- or cooperating-teacher)	?-?	?	?
175	Student-teaching should be followed by additional course work	?-?	?	?
176	Feedback from student-teachers and cooperating-teachers should be regularly incorporated into teacher-training course revisions	?-?	Y	Y
177	Student-teaching assignments, that is where someone is sent to do practice- or student-teaching, should allow for individual student differences	?-?	Y	Y
178	Student-teachers should participate in group counselling sessions	?-?	Y	Y
179	The period of student teaching should be long enough to allow for individual style to be developed	?-Y	Y	Y
180	The student-teaching experience should be long enough to allow the development of teacher-role assumption, not teacher-role playing	Y-?	Y	Y
181	Cooperating-teachers should be selected by school principals	?-?	?	?
182	Cooperating-teachers should be selected by university faculty	?-?	?	?
183	Student-teaching performance should be a criterion for keeping someone in the teacher training program	Y-?	?	Y
184	Cooperating-teachers as well as student-teachers should be told beforehand what their duties and responsibilities will be	?-?	Y	Y

TABLE 15 -- Continued

Item Number	Description	Response Group		
		CP (N=42)	TA (N=115)	S (N=141)
185	Student team-teaching, that is, working with other teachers in preparing and presenting a lesson, should be a regular part of the student-teaching program	?-?	?	Y
186	Student-teachers should get experience in an urban setting	N-?	?	?
187	The student-teaching program should provide opportunities for experience in <u>all</u> phases of teachers' work	Y-?	Y	Y

Internships

There were thirteen items in this parameter dealing with the kinds of preparatory, actual teaching experiences secondary school teachers need before they are certified. Internships are usually full-time, supervised teaching positions and follow the Bachelor's degree in liberal arts. They are often part of a Master of Arts in Teaching program.

The only internship factor revealed as descriptive of the institutions in the sample was that the professional sequence generally was provided as a prerequisite to the Bachelor's degree (75). Professors and students felt that the liberal arts should not constitute a total four-year program. One student thought that to make it a four-year program would be a

Great idea in theory—teachers would be more qualified; but how many teachers will we get—can we handle the even greater shortage we'd have if teachers had to attend more school for their degree?

All three groups felt that admission to an internship should depend on faculty recommendations (166). Teachers and students agreed that other criteria should be student teaching success (165) and personal character (168). Students' comments suggested they had little faith that either criterion could be evaluated. No group was significantly agreed that criteria for admission should include scholastic rank (167) or success in methods courses (169).

Teachers felt that some form of internship should be included in every pre-service program (164). Students felt that the internship probably should not last more than one academic year (171).

Table 16 summarizes these data. There were no items which were descriptive of current practice and which were agreed upon by all three groups. No group was significantly agreed on whether secondary teacher preparation should be in separate agencies of higher education, like medicine and law, and have as a prerequisite the Bachelor's degree (74). One professor thought it might be a good idea "if we could afford the time." Another said

At this juncture, let's be realistic in Ohio. Ever since I've been teaching, over twenty years, Ohio has not put qualified teachers in many of its classrooms (qualified by State standards). Why not make present standards

TABLE 16 — Summary of Responses to the TEAS for the Parameter "Internships"

Item Number	Description	Response Group		
		CP (N=42)	TA (N=115)	S (N=141)
23	Secondary teacher preparation should be in separate agencies of higher education, like medicine and law, and should have as a prerequisite, the Bachelor's degree	?-?	?	?
75	The liberal arts program for secondary teachers-in-training should constitute the entire four years college program, with the professional sequence beginning after the Bachelor's degree	N-N	?	N
164	The Internship, a program of teacher training that usually requires about a year of regular school teaching before a certificate is given, should be a part of every professional preparation program	?-?	Y	Y
165	Admission to an internship program should depend on the following criteria: student-teaching success, that is, successfully completed a program of supervised practice teaching under an experienced school teacher and guided by a college professor	?-?	Y	Y
166	faculty recommendations	?-Y	Y	Y
167	scholastic rank	?-?	?	?
168	character	?-?	Y	Y
169	success in courses dealing with teaching methods	?-?	?	?
170	Interns should get paid	?-?	Y	Y
171	The internship should last <u>more</u> than one academic year	?-?	?	N
172	The internship should last <u>less</u> than one academic year	?-?	?	?
174	Internships should be given after the Bachelor's degree	?-?	?	?

meaningful before such a standard is set. Isn't the present questionable professional status a good example, of past and present hypocrisy? Let's not perpetuate the practice.

Teachers' comments indicated concern about producing enough teachers. For example, one teacher said:

Ideally, this is as it should be; but due to the need for teachers, we don't have time and resources needed to support such long-term teacher education.

A high school student commented:

Strongly agree that teacher education should be considered as professional training after a Bachelor's degree and not as a substitute for a B.A. By marking "agree" to this question, I do not mean to indicate that this program should be exactly like that of medicine and law, that is, costing a great deal of money and lasting four years. Not over 18 months—probably much less would be sufficient.

Purposes and Methods of Continuing Education

The seven items in this parameter dealt with the general goals, aims, and objectives of teacher education programs which occur after certification and placement. It is frequently referred to as in-service education and includes procedures and outcomes.

All groups agreed that what happens in the secondary school classroom is the most significant outcome of continuing teacher education (30). One college student said, "What is more important is what happens in the teacher and in the student—something intangible, perhaps not even able to be measured."

Students felt that continuing education programs should frequently stress academic content (232). Two teachers commented that keeping up with subject matter "...should be the teacher's own responsibility," and perhaps have

nothing to do with planned continuing education. Students felt that visitations were beneficial (198). One teacher suggested that visitations should be "allowed but not encouraged."

Teachers' comments about whether continuing education is more important than preservice education (28) suggested that one should not be considered more important than the other; for example,

This does not mean preservice education is not important, but that education can be more meaningful after some experience with the practical problems.

A professor said:

Attitude is all important. If one is desirous of being a good teacher, the best of which he is capable, he will continue his education as best he can.

Table 17 summarizes the data for this parameter. Note that five items lacked significant agreement from any group.

Responsibility and Accountability for Continuing Education

The fifteen items in this parameter dealt with the roles of the different agencies affecting continuing education in Ohio. These included the universities, the schools, the State Department of Education, and the associations and related organizations.

Teachers' responses indicated that the school districts in the sample did not generally provide for sabbatical leaves (197), for programs for substitute teachers (226), or the use of holiday periods for conducting continuing education programs (199). One teacher said that sabbaticals:

[Are] not reasonable now. High school teachers are not professional. They have summers for recharging if they'd use them.

TABLE 17 — Summary of Responses to the TEAS for the Parameter
"Purposes and Methods of Continuing Education"

Item Number	Description	Response Group		
		CP (N=42)	TA (N=115)	S (N=141)
28	Continuing education is more important for teachers than pre-service education	?-?	?	?
30	What happens in the secondary school classroom is the most significant outcome of continuing teacher education	Y	Y	Y
54	High school teachers should be specialists in an academic discipline, not generalists	?-?	?	?
198	Secondary school teachers should visit other schools and watch other teachers teach	?-?	?-?	Y
227	Continuing education programs should stress the non-tutorial role of teachers; that is, those things not directly dealing with instruction	?-?	?-?	?
229	Continuing education workshops should be conducted as demonstration models; that is, conducted in the way the teachers would be expected to teach	?-?	?-?	?
231	Continuing education programs should be used by school administrators to identify prospective administrators and supervisors for their districts	?-?	?-?	?
232	Continuing education programs should frequently stress academic subject matter content	?-?	?-?	Y

Students felt that school districts should provide sabbaticals. A college student suggested "more frequent, shorter leaves." A high school student said:

Teachers are humans, too—don't they deserve a real vacation? It would be more beneficial to the students to have a happy, relaxed teachers than one who is completely worn out from endless (usually only moderately beneficial) meetings.

The students felt that substitutes should have opportunities to participate in continuing education programs. They thought, too, that teachers should participate in at least two weeks of continuing education per year (201); but teachers had no comments on the matter. One high school student said, "I would hope that anyone who is a teacher is interested in making his entire life a continuing education experience." Students also said that teachers and professors should meet regularly to discuss professional problems (230). Teachers were agreed that no such program was available to them. They were not significantly agreed about the worthwhileness of such a program, either. One professor noted that "opportunities are provided, but no planned program...is available." A college student remarked that "college profs are also scoffed at by many teachers who say 'they don't understand what high school classrooms are like!'"

Professors and students significantly agreed that continuing teacher education should be a responsibility of the schools and the universities (27). Students felt that teachers who participate in continuing education programs should be paid extra (200) and that school districts ought to earmark a regular percentage of their budgets to research and continuing education (196). One teacher pointed out that some districts may want to allocate a regular amount, but current financial problems prevent it.

Table 18 summarizes these data. The table shows that seven items were not significantly agreed upon by any group. Three of them had to do with the role of the State Department of Education. No group was agreed whether continuing education programs should be developed by the State Department or by the school district; or who should supply the money for it (24, 25, 26). Professors felt that it depended on the resources available in the district. One professor said,

...our present financing of schools has caused such inequities it makes no sense to increase the inequities by demanding more of districts which cannot comply satisfactorily to present demands. Let's have proper State support for

TABLE 18 — Summary of Responses to the TEAS for the Parameter
"Responsibility and Accountability for Continuing Education"

Item Number	Description	Response Group		
		CP (N=42)	TA (N=115)	S (N=141)
24	Continuing education should be developed and paid for by the public school district	?	?	?
25	Continuing education should be developed by the school district and paid for by the State of Ohio Department of Education	?	?	?
26	Continuing education should be developed and paid for by the State of Ohio Department of Education	?	?	?
27	Continuing teacher education should be a responsibility of both the public schools and the universities	Y	?	Y
29	The development of continuing education programs is the responsibility of the public schools	?	?	?
72	The Ohio State legislature should provide leadership for universities to coordinate public elementary and secondary education with higher education	?	?	?
196	School districts should earmark a regular percentage of their budget to research and continuing education	?	?	Y
197	School districts should provide their teachers with paid sabbatical leaves; that is, allow teachers a year of absence every seven years (at about half salary) to permit an opportunity for travel or further study	?	?	Y
199	School districts should use holiday or vacation time, such as Christmas and Thanksgiving, for continuing education programs	?	N-?	Y
200	Teachers who participate in continuing education programs should be paid extra	?	?	Y

TABLE 18 — Continued

Item Number	Description	Response Group		
		CP (N=42)	TA (N=115)	S (N=141)
201	Teachers should participate in at least two weeks per year of continuing education	?-?	N-?	Y
202	Schools should use the State Education Department guidelines for continuing education programs	?-?	?-?	?
226	School districts should provide continuing education programs for substitute teachers	?-?	N-?	Y
228	College professors should conduct continuing education workshops in school districts during the regular school year	?-?	?-?	?
230	School teachers and university professors should meet regularly to discuss professional problems			

present educational needs and then more power, BUT let's not kid ourselves that the present financial state of Ohio schools is in no way the result of the State government. Our State administration has for eight years talked a good "game." Talking is no longer satisfactory—let the State put up or shut up.

Teachers commented that the schools and the State Department need to work cooperatively. Students felt that continuing education programs should be "developed at the local level to meet specific needs and helped financially through State administered funds." Professors' comments on the item "The development of continuing education programs is the responsibility of the public schools" (29) tended to be negative, but the data were not significant. The leadership potential for the State legislature (72) was also questioned. One teacher asked, "If they cannot provide leadership financially, how in the hell are they to provide leadership otherwise?" Another teacher suggested the State Board of Education be charged with some leadership responsibility in this area.

College students questioned the practicality of having professors conduct continuing education workshops in the schools (228). One college student thought it was a good idea only "if they do enough high school teaching themselves."

Purposes and Methods of Differentiated Staffing

This parameter comprised the most items in the TEAS. There were thirty-eight items dealing with the general goals, aims, and objectives for utilizing the specialized skills of school personnel. Related topics included the use of paraprofessionals, teacher aides, and other educational assistants.

All three groups agreed that differentiated staffing could allow more effective use of teacher talent (2), a more flexible schedule (10), more opportunities for experimentation (18), the development of improved school programs (19), and a more individualized program for children (9). Teachers' comments suggested that although differentiated staffing could do these things, they, in fact, have not been accomplished.

All three groups agreed that teachers should cooperate in the improvement

or instruction (203). One teacher qualified his agreement with "only in certain departments." The notion that differentiated staffing roles should be reflected in the preservice program (5) brought agreement from all groups, "assuming" as one teacher put it, "that those who set the programs on the collegiate level will involve all facets of education." A professor said,

Such a trend would propagate a number of programs which disjoint aims and students. It seems clear to us that no university regardless of size, could successfully attempt to be "all things to all people" in this area.

According to teachers' responses, training programs for auxiliary educational personnel are provided by the schools. These programs, however, do not generally provide specific instruction in how to tutor high school students (205), how to help teachers with students who have problems (209), how to serve as laboratory assistants (210), or how to help the teacher with his reading program or in evaluating students (211). Teachers were not significantly agreed whether or not such instruction should be given. Students were agreed that it should be.

Professors and students felt that differentiated staffing could help relieve the shortage of help in classrooms (7). One teacher remarked "there is no manpower shortage in the classroom." Professors and teachers were agreed that differentiated staffing was not merely a guise for implementing merit pay (21). One teacher said that "sometimes differentiated staffing is used for just that" while a professor commented, "I don't believe this is a primary motive of those professionals who initiated the program. BUT I suspect many secondary teachers hold this as a primary motivation."

Teachers and students believed that a differentiated staffing plan could serve as a valuable school-community relations tool (8), and that it should serve primarily to improve the learning opportunities for children (22).

Professors agreed that differentiated staffing could reduce teacher dropout (4) as well as provide career opportunities for some paraprofessional personnel (13). Students agreed that it could improve intercultural contacts (11) and allow more planning time for teachers (16). Students were almost totally united on all aspects of training programs for paraprofessionals. They felt that such programs should include instruction in:

how to help high school students do independent study (206)

how to organize their extra curricular activities (207)

how to set up audiovisual equipment (208)

how to help the teacher with instructional activities (212)

how to file (213), operate duplicating equipment (214), type (215), record grades (216), and to help in the library (218)

how to supervise cafeterias, hallways, and lavatories (217)

how to distribute instructional materials (219)

how to communicate with secondary school students (221)

how to use other staff members' skills effectively (222)

Students also suggested that preparation programs for such personnel be based on first-hand, rather than vicarious learning. Only students agreed that teachers and paraprofessionals should pursue course work together (225).

Students were agreed that placement into differentiated staffing positions should be based on educational backgrounds and experience (15). One teacher remarked that "the extent of training and experience does not necessarily guarantee who is the best suited for particular positions." Another teacher and a professor suggested that the person's abilities and interests be included as well.

These data are summarized in Table 19. Note that three items lacked significant agreement from any group. One item suggested that differentiated staffing could be a boon to the job-seeking poor of a community (6). Teachers' and professors' comments revealed that economic uplifting should not influence the implementation of differentiated staffing plans. The other items dealt with additional male models in the class (12) and teaching paraprofessionals how to supervise clean-up activities (220).

TABLE 19 — Summary of Responses to the TEAS for the Parameter
"Purposes and Methods of Differentiated Staffing"

Item Number	Description	Response Group		
		CP (N=42)	TA (N=115)	S (N=141)
2	Differentiated staffing could allow for the more effective use of teacher talent	Y	Y	Y
4	Differentiated staffing can decrease the number of teachers who leave teaching	Y	?	?
5	Teacher education programs can be made more specific as differentiated staffing roles become better defined	Y	Y	Y
6	Differentiated staffing can create more jobs for the economically poor by allowing schools to hire community people to become teacher aides or paraprofessionals	?	?	?
7	Differentiated staffing could help relieve the shortage of help in classrooms	Y	?	Y
8	Differentiated staffing can serve as a valuable link between the schools and the community	?	Y	Y
9	Differentiated staffing can provide children with more individualized instruction	Y	Y	Y
10	Differentiated staffing could allow for a more flexible schedule	Y	Y	Y
11	Differentiated staffing could improve intercultural contacts	?	?	Y
12	Differentiated staffing could provide additional male models for male students	?	?	?
13	Differentiated staffing positions could provide for voluntary upward mobility for some paraprofessional personnel	Y	?	?
15	Differentiated staffing positions should be based on educational backgrounds and experience	?	?	Y

TABLE 19 — Continued

Item Number	Description	Response Group		
		CP (N=42)	TA (N=115)	S (N=141)
16	Differentiated staffing could allow the teacher more time for preparing lessons	?	?	?
18	Differentiated staffing could allow teachers more opportunities to experiment and innovate	Y	Y	Y
19	Differentiated staffing could enable teachers to develop better courses and curriculums	Y	Y	Y
21	Differentiated staffing is just a way to pay teachers according to their ability rather than according to their experience and educational background	N	N	?
22	Differentiated staffing is primarily a device for improving the learning opportunities of secondary school students	?	Y	Y
203	Teachers ought to work together for improving what happens in the classroom	Y	Y	Y
	Training programs for auxiliary educational personnel, such as paraprofessionals and teacher aides should provide instruction in:			
205	how to tutor secondary school students	?-?	N-?	Y
206	how to help secondary school students do independent study	?-?	?-?	Y
207	how to help secondary school students organize extra-curricular activities	?-?	?-?	Y
208	how to set up audiovisual equipment	?-?	?-?	Y
209	how to help teachers with students who have problems	?-?	N-?	Y
210	how to serve as laboratory assistants, e.g., chemistry	?-?	N-?	Y
211	how to help the teacher in reading and evaluating students	?-?	N-?	Y

TABLE 19 -- Continued

Item Number	Description	Response Group		
		CP (N=42)	TA (N=115)	S (N=141)
212	Training programs for auxiliary educational personnel, such as			
	paraprofessionals and teacher aides should provide instruction in:			
	how to help the teacher with instructional activities in art,			
	music, and on field trips	?-?	?-?	Y
213	how to file educational materials	?-?	?-?	Y
214	how to operate duplicating equipment	?-?	?-?	Y
215	how to type	?-?	?-?	Y
216	how to record grades	?-?	?-?	Y
217	how to supervise cafeterias, hallways, and lavatories	?-?	?-?	Y
218	how to help in the library	?-?	?-?	Y
219	how to distribute instructional materials	?-?	?-?	Y
220	how to supervise clean-up activities	?-?	?-?	?
221	how to communicate with secondary school students	?-?	?-?	Y
222	how to use other staff members' skills effectively	?-?	?-?	Y
224	Preparation for paraprofessional personnel should be primarily			
	firsthand rather than theoretical or second-hand	?-?	?-?	Y
225	Teachers and paraprofessionals should participate together in			
	course work	?-?	?-?	Y

Responsibility and Accountability for Differentiated Staffing

This parameter contained eight items and dealt with the roles of the different agencies affecting differentiated staffing programs in Ohio.

All three groups agreed that different amounts of teaching responsibility should allow for salary differences (3); that different methods of recruiting and training are needed to provide for a differentiated instructional staff (17), and that the training of teacher aides and similar personnel should be the joint responsibility of the schools, the universities, and the State Department of Education (14). One professor said "the State Department probably does have a function in setting some minimum standards. Otherwise its contribution is probably slight."

Teachers indicated that differentiated staffing would be acceptable as long as everyone is directly responsible to the principal (20). A professor noted that "all are involved in the educative process, but how does one keep peace horizontally or on a hierarchical scale?"

Only students agreed that teacher aides ought not be responsible to more than five teachers (31). Two professors recommended no more than two teachers. Students were also agreed that teacher aides should show evidence of being committed to education before they are admitted to a training program (223). They also felt that both schools and colleges need to train such personnel.

Table 20 summarizes these data. Only the teachers indicated that gifted teachers should be allowed to exert more influence on their students and colleagues than less gifted teachers (1). No teacher commented on this item. One professor summarized the feelings of his group when he said,

First, one quality of a "gifted teacher is that he or she does, in fact, have good, positive influence on both students and colleagues. Second, assigning teachers to a continuum of "giftedness" is a task involving many variables, each of which might be quite difficult to measure. Third, we strongly agree that teachers should not be prevented, by those in charge from taking an active role in the decision making process, or from trying to improve the curriculum and teaching-learning process.

TABLE 20 — Summary of Responses to the TEAS for the Parameter
"Responsibility and Accountability for Differentiated Staffing"

Item Number	Description	Response Group		
		CP (N=42)	TA (N=115)	S (N=141)
1	Gifted teachers should be allowed to exert a much greater influence on their students and colleagues than less gifted teachers	?	Y	?
3	Different amounts of teaching responsibility should allow for salary differences	Y	Y	Y
14	The training of paraprofessionals and teacher aides should be the joint responsibility of the schools, the universities, and the State Department of Education	Y	Y	Y
17	Different methods of recruiting and training are needed to provide for a differentiated instructional staff	Y	Y	Y
20	Differentiated staffing would be acceptable as long as everyone is directly responsible to the principal	?	?	?
31	Teacher aides should be responsible to no more than five teachers	?	?	Y
204	School systems and colleges need to train paraprofessionals and teacher aides	?	?	Y
223	Before teacher aides, paraprofessionals, and other auxiliary educational personnel are admitted to a training program, they must show evidence of a commitment to the field of education and to their own continued growth	?	?	Y

Section 3. Review of the Findings of the Teacher Education Assessment Survey

The purposes of the TEAS were to learn what is happening in teacher education in Ohio and what college professors, teachers, administrators, and college and high school students think should be happening. This instrument attempted to assess teacher education by covering seventeen parameters dealing with preservice education, continuing education, and differentiated staffing. The items were distributed to make it easy to respond to and to avoid as much "halo effect" as possible. There were 163 items relating to preservice education, 23 to continuing education, and 46 to differentiated staffing, for a total of 232.

Analysis of the responses revealed that 64 of the 232 items, or nearly 28 percent, were considered to be significantly descriptive of teacher education in Ohio. The respondents were significantly agreed, both within and between groups, that 31, or nearly half, of those items should be descriptive of Ohio teacher education programs.

There were no descriptive items with which the groups disagreed; that is, no group felt that any of the descriptive items should not be descriptive. Then, too, there were many descriptive items with which no group agreed. Many items described what was happening, and others described what was not happening. Respondents agreed that certain practices ought not happen either. None of these practices was descriptive. For example, in the Purposes and Methods of Preservice Education parameter, eleven items were found to be descriptive of what was happening in the preservice programs at the sample institutions. These items were mentioned earlier in a section devoted to this parameter. It was found that, in general, the secondary teacher preparation programs in the sample institutions:

1. Were not based on a written philosophy developed jointly by students and faculty
2. Stressed a national rather than international perspective
3. Tended to maintain rather than reduce the number of professional education courses
4. Reflected the increasing multiplicity of the teacher role
5. Had a perceived balance of professional

education, subject field concentration, and liberal arts study

6. Provided liberal arts programs which constituted about half the course work required for the Bachelor's degree
7. Provided liberal arts programs that preceded the professional sequence
8. Provided professional sequences according to the needs of the students
9. Provided professional instruction through a variety of methods, but not as a model for future secondary school teaching
10. Moved from vicarious to first-hand experiences

While all these statements are descriptive, only statement 10 was regarded by all groups as something that should be happening. Statements 1, 2, and 6 lacked significant agreement by any group. They were, nevertheless, descriptive.

The descriptive items in the Responsibility and Accountability for Preservice Education parameter revealed that professors were usually familiar with the problems, policies, and procedures of the local school districts; and that teacher organizations such as the OEA and the AFT were not responsible for setting up the professional programs at the sample institutions. Equally important was the finding that no group could agree whether the teacher organizations should have such responsibility. The institutions did not appear to have established mechanisms for maintaining up-to-date teacher preparation programs, even though all three groups significantly agreed they should have them.

The liberal arts programs in the sample institutions usually included required course work in the behavioral, natural and social sciences, and in the humanities, physical education, and communication skills. Professors, teachers, and students agreed that work in the behavioral sciences and the humanities should be required. No group felt that physical education should be required in the liberal arts program.

The preservice programs were not generally based on the idea that anyone

who can get a Bachelor's degree can be a teacher. All three groups felt this was as it should be. They also felt that students' academic progress should be reviewed regularly. This tended to be the case. The institutions did not generally require either a record of high academic achievement in college or a demonstrated ability to work with children as criteria for admission to the professional program.

The sample institutions generally provided a wide range of learning experiences in the areas of psychology and human growth and development, including:

1. General educational psychology
2. Human growth and development
3. Adolescent psychology
4. Theories of learning

All three groups agreed that items 2, 3, and 4 above should be provided; but professors were not significantly agreed on item 1.

Trainees were given instruction in contemporary issues in education, in how to decide what is important to teach, and what is not, and in existing policies and practices regarding teacher welfare and certification. Professors were not significantly agreed that instruction in welfare and certification should be provided in preservice education. All three groups felt that placement services were necessary.

The preservice programs generally provided instruction in several areas relating to the planning and development of learning activities, including:

1. The principles and practices of secondary education
2. Curriculum development
3. The use of educational theory
4. Making, selecting, and using learning materials and equipment

The professors did not significantly agree on whether instruction in any of these areas should be provided.

In the parameter "Organizing and Providing for Learning Activities," it was found that instruction was generally given in:

1. How to organize class groups for instruction
2. How to establish a positive classroom climate
3. How to manage the secondary school classroom
4. How to provide for the individual differences of children
5. Methods of teaching

Except for item 1, above, all three groups were significantly agreed that such instruction should be provided. All three groups felt that instruction should be given in how to use instructional materials centers and how to function as a member of a teaching team. The data did not indicate that such instruction was provided. Instruction in how to evaluate and report student progress was generally provided and was considered desirable by all three groups. Professors said their institutions provided instruction in how to keep up with new curriculum methods.

Institutions generally provided laboratory experiences, such as observing and brief teaching opportunities as part of their preservice programs. They were also seeking new forms of laboratory experiences. All three groups felt these things were desirable.

It was found that professional education courses were not taught only through laboratory experiences. Professors agreed that such courses ought not be taught that way. Teachers and students were not so sure.

Student teaching assignments were long enough to allow development of teacher role-assumption rather than just teacher role-playing. Student teaching performance was usually a criterion for retention in the preservice program. Student teachers did not generally get—nor was any group significantly agreed that they should get—experience in an urban setting. All three groups felt the student teaching assignment should be long enough to allow for the development of individual teaching style; however, this was not generally available.

The only significant finding regarding internships was that they were not designed to replace the undergraduate professional sequence. Admission to

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internship programs were not dependant upon faculty recommendations; however, all three groups indicated it should be.

Teachers and professors were generally agreed that most of the content in the undergraduate program requires additional study through continuing education programs. All three groups felt that the most important outcome of continuing education programs was what happens in the classroom. Analysis of current practices in continuing education showed that the school districts in the sample did not usually (1) require teachers to give up vacation time for continuing education programs, (2) provide such programs for substitute teachers, or (3) provide paid sabbaticals for study or travel. It was also found that teachers probably do not participate in as much as two weeks per year of continuing education and that teachers and professors in the sample institutions do not meet regularly to discuss professional problems.

The availability of training programs across the state was sporadic. Training programs for auxiliary educational personnel, such as teacher aides, did not generally provide instruction in:

1. how to tutor students
2. how to help teachers with students who have problems
3. how to serve as laboratory assistants
4. how to help teachers with reading programs or in evaluating students

All three groups felt that differentiated staffing had many advantages, including:

1. More effective use of teacher talent
2. The facilitation of flexible scheduling, experimentation and innovation, the individualization of instruction, and cooperative planning for curriculum improvement
3. The opportunity for establishing more definitive roles for teachers which could,

in turn, influence change in preservice programs

4. More opportunities for recognizing levels of teacher responsibility, thereby allowing salary differences

The three groups also felt that the State Department of Education, the universities, and the public schools should work together to train paraprofessionals and teacher aides. Finally, all were significantly agreed that different methods of recruiting and training were needed to provide for a differentiated instructional staff.

Section 4. Preservice Education at Eight Ohio Institutions

Any survey of the status of teacher education should include at least a summary review of how teacher preparation institutions describe their secondary preservice programs in their catalogues, bulletins, and other published materials. The purpose of this section is to describe how secondary school teachers were being prepared in eight selected colleges and universities in Ohio during the 1969-1970 school year. These institutions were selected according to size, location, support or control, and coeducational status. A description of the sample and how it was selected was presented in Chapter III.

Institution 1. A Small, Nonurban, Church-Affiliated, Coeducational College

According to the catalog published by this college, all students at this institution are offered programs emphasizing:

1. Superior academic curricula by a well-trained faculty
2. Personal interest in each student and his fullest total development
3. Varied student activities in which all students are encouraged to participate actively
4. Friendly community spirit
5. Christ as the integrating principle in campus life

The college is accredited by, and is a member of, the North Central Association of Colleges and Secondary Schools (NCACSS). It is also an institutional member of many professional and learned organizations.

Admission to the college is based on high school graduation with at least 16 units of credit and evidence of good moral character. Completion of the Scholastic Aptitude Test (SAT) or the American College Test (ACT) is also required, plus a campus visit and interview.

Requirements for the Bachelor's degree include completion of 120 semester hours of academic work. This work must include general education, demonstrated proficiency in the use of the English language, and the completion of a

comprehensive major. Additional requirements include at least average grades, a minimum of one year in residence, completion of the Graduate Record Examination in the student's major field, completion of secondary teacher education requirements, and participation in certain student events. A junior year abroad, an international studies program, and an independent study program are also available.

The general education or liberal arts program constitutes about 40 percent of the total program. This program includes religion, philosophy, psychology, communications, literature, fine arts, foreign language, science or mathematics, social science, and intercultural study. A special feature is a three-week interterm topic. One interterm, normally in the junior year, may be devoted to a topic of the student's choice if approved by his faculty advisor.

The academic program has four divisions: (1) Christian foundations, (2) the humanities, (3) the natural sciences, and (4) the social sciences.

Teacher education is part of Division 1. The published secondary preservice program seeks to provide students with:

1. An understanding and acceptance of the professional responsibilities and obligations of teachers in America
2. A working knowledge of the physical, motor, intellectual, social, emotional, and moral development of children, pre-adolescents, and adolescents
3. A working knowledge of the learning process and the psychological basis involved
4. A philosophy of education based upon the purposes of education in an American democracy
5. A demonstrated understanding of the principles of teaching
6. A knowledge of the development and present status of education in an American society, and more specifically, in Ohio
7. A working knowledge of the available instructional materials used to improve the curriculum

8. An understanding of the relationship existing between instruction and the curriculum
9. A working knowledge of the teacher's responsibility to organize, observe, interpret, and record the outcome of human behavior
10. An effective understanding of the necessity as well as the ability to evaluate the results of instruction as related to the teacher's methods of instruction

Graduates are expected to behave as professional teachers who:

1. Influence students in a wholesome manner
2. Possess a body of knowledge in a field vital to our society and of interest to adolescents
3. Know how to challenge adolescents to do their best
4. Respect the worth of each individual
5. Can communicate effectively with all others with whom his position causes him to work
6. Actively engages in professional and non-professional experiences for the benefit of all concerned

Admission to the preservice program requires approval by a Teacher Education Advisory Committee. Approvals are made at three separate points in the program: (1) when the student is admitted, (2) before student teaching, and (3) when he is recommended for certification. Criteria used by the Committee in considering these applications include academic standing, demonstrated skill in communications, participation in college activities, health, and faculty recommendation. Recommendation for certification requires students to take at least 18 hours in professional courses including developmental and educational psychology, school and society, curriculum and methods, and student teaching. These three areas constitute a "block," which must be taken during the first quarter of the senior year or the summer following it. Con-

current with the "block," students may pursue a maximum of four additional hours, typically in their major fields. Students are advised to have several teaching fields to facilitate placement.

The student teaching period lasts five hours daily plus one full afternoon per week for eight weeks. Each student teacher is visited five or six times during the student teaching period by one of the seven college supervisors.

Opportunities are available for dual certification. Dual certification enables one to teach at both elementary and secondary levels in the specified subject area. This may be accomplished by adding six semester hours of professional courses and sufficient additional hours in the subject area to the elementary program.

To be recommended for secondary teaching certification, the subject requirements are as follows:

Art	30 semester hours		
English	36	"	"
Speech.	12	"	"
Foreign Language	39	"	"
Music	26	"	"
Biology	40	"	"
Chemistry	40	"	"
Physics	12	"	"
Health and Physical Education	22	"	"
Social Science (Comprehensive major)	45	"	"

Students are informed of available teaching positions through a placement office. Supply and demand data are supplied to the students through the faculty and through information posted on the department of education bulletin board.

Institution 2. A Small, Nonurban, Coeducational, Church-affiliated College

The catalog from this institution states its purpose is to "guide its students, one at a time, through the crucial college years. This guidance must be accomplished with care and concern that the student's precious individuality will not be lost, concern that the student will get the best possible preparation for a productive life."

The college operates with the following prescribed goals:

1. The development of academic competence in a field of the student's choice
2. The learning of skills for effective communication—speaking, reading, listening, and writing
3. The establishment of discriminatory thinking processes
4. The understanding of basic rules of health that contribute to mental and physical well-being
5. The enrichment of religious experience, the enlightenment of conscience and the development of a wholesome philosophy of life, a proper respect for self and fellows, and a scale of values based on Christian ideals
6. The creation of imaginative leadership qualities through participation in campus activities
7. The development of sensitivity to beauty in art, music and literature

The institution is accredited by the NCA CSS and is a member of numerous professional societies and organizations.

Each applicant must be graduated from a recognized high school and submit SAT scores. For placement purposes, students are required to complete the English Achievement Test of the College Entrance Examination Board (CEEB) and two additional achievement test of their own choice. A campus visit and interview are also suggested.

A unique feature of this institution is its Winter Term program. Referred to as the 4:1:4 plan, it consists of two semesters in each of which students pursue four courses and a one-month term in January when students take a special course. The purpose of this plan is "to improve the quality of instruction by concentrating student effort upon fewer courses at a time; by providing more opportunities for independent study for all students at some time during the four years; by providing a wider variety of educational experiences; and by

stimulating the faculty and student body to attempt new and unique intellectual experiences."

Other special learning opportunities at this institution include a Forum Program of cultural and artistic events, and opportunities to study abroad.

Requirements for the Bachelor's degree include the satisfactory completion of 33 "course units" of credit and four semesters of physical education. The "course unit" has replaced the semester hour unit and is defined as an educational unit lasting one semester (14 weeks) and occupying about 1/4 of the student's time, or an educational unit lasting one month (4 weeks) and occupying all of the student's academic time. In addition to the completion of course work, students must achieve at least average grades, complete a major subject field; participate in three Winter Terms; and have at least one full semester in residence. All students are required to complete course work in English, science, mathematics, history, social science, humanities, foreign language (or approved alternate), and physical education.

To qualify for a high school teaching certificate, the institution requires students to take a course in the Foundations of American Public Education (1 course unit), Practices of the High School Teacher (1 course unit), Student Teaching (2 course units), a Methods course in the major field (1 course unit), Educational Psychology (1 course unit), a course in Speech (1 course unit), and an acceptable teaching major. Students are urged to complete a second teaching field.

Application for admission to the professional sequence is normally made during the sophomore year. Admission depends upon acceptance by a seven-member Teacher Education Council consisting of two professors from the department of education and five from the faculty at large. All students may be considered for admission to the teacher education program. To be admitted, students must have completed the Foundations course in education, have maintained a 2.0 cumulative point average, have completed a formal application, and interviewed a member of the department of education. The Teacher Education Council and the faculty also conduct regular reviews of student progress.

The student is also required to have a pre-student teaching field experience. The field experience consists of observation and participation activities and may be completed during the sophomore year following acceptance to the teacher education program.

The institution will recommend students for secondary school certification only when most of the professional education work, including two course units

of student teaching, has been taken at the college. Required preparation for secondary teachers includes 22 semester hours of work plus 44 semester hours in the liberal arts.

The college will not permit any other institution to supervise its student teachers and will not accept toward certification any credit in special methods courses earned through correspondence study. Upon the satisfactory completion of all degree and certification requirements, the necessary forms for certification are processed and forwarded to the State Department of Education for approval.

To be recommended for certification from this institution, the academic requirements by subject area are as follows:

Art	8 course units
Biological Science	5 " "
Bookkeeping-Basic Business	5 " "
Earth Science	5 " "
English	7 " "
Foreign Language (French, Spanish)	6 " "
General Science	6 " "
History and Government	8 " "
Mathematics	5 " "
Physical Education and Health	7 " "
Physical Science	6 " "
Speech	5 " "
Stenography-Typing	6 " "
Comprehensive Science	13 " "
Comprehensive Social Studies	13 " "

Placement services are provided. Information on teaching opportunities are made available to candidates through interviews and a bulletin board outside the placement office. The students are kept informed of supply and demand and certification requirements in the special methods courses and in the introductory Foundations course.

The institution requires 120 clock hours of student teaching plus 60 hours of related experiences. The number of supervisory visits depends upon the needs of the student teacher. Supervisors attempt to visit each student at least twice every three weeks.

Institution 3. A Small, Nonurban,
Coeducational, Private College

The major purpose of this institution is to "equip college students to live effectively in a complex and changing world and to help meet society's changing needs." Its aims are to "cultivate the intellectual, appreciate the beautiful, and manage the emotional so that individuals learn patterns of behavior that will reward them by personal fulfillment and that will further a society of justice and moral order." According to a recent study conducted by this college, students say that their goals in college are to develop their individual and intellectual skills, to get a basic, general education, and to better understand the problems and peoples of the world. The institution is accredited by the NCACSS and is a member of AACTE and many other professional and learned societies.

Five years are required for the completion of its preservice program. About 10 to 15 percent of its graduates finish in four years. Students are encouraged to study independently, to progress at their own rates, and to avoid repeating previous accomplishments. Students typically pursue three five-credit courses each quarter, or about 15 credits. The requirements for the Bachelor's degree include 71 quarter hours of general education, 60 quarter hours in a subject area or major, 29 quarter hours in elective studies, and 90 extramural or cooperative work quarter hours.

The objectives for the liberal arts program are to develop:

An adequate philosophy and way of life consistent with it

An appreciation and understanding of one's self

An orientation to the physical universe and to human society

Competence and ability to participate in a satisfying range of recreation

Ability to choose and progress in a socially useful and personally satisfying career

More effective attitudes, skills, and understanding in human relationships in family, vocational, and civic life for human welfare generally

Appreciation of literature, music, and the arts,
and participation in creative activity

Good management of one's resources and a sense
of proportion in keeping expectations and achieve-
ment reasonably related

Competence and interest in self-directed and
sustained educational growth

Skills for improving effectiveness, and satisfaction
in achieving these objectives

This development is provided through (1) a cooperative plan, (2) community living, (3) education abroad, and (4) academic study. The liberal arts constitute about 50 percent, or a minimum of 60 quarter hours, of each student's work in the secondary preservice program. At least nine quarter hours are required in each of (1) the arts and humanities, (2) physical science and mathematics, (3) the social sciences, (4) literature and foreign language. Six quarter hours of physical education and completion of the Graduate Record Examination in mathematics, English, and the student's major area of study are also required. First year students, with the help of a faculty preceptor, learn to help plan their own learning program. The college provides the resources and the learning opportunities. The students plan for their use, execute the plan, and demonstrate that they have used and benefited from them. This evidence is evaluated, and the results are entered on each student's record rather than grades. Along with this general education study and his academic major, the student is expected to go out on co-op jobs and participate in community activities via an extramural program. The purpose of the extramural program is to expose the student to situations that are educationally, socially, culturally, and geographically different from what they are used to. Other features which make preservice education at this institution unique include intensive research projects by the faculty and students, and a Visiting Scholar Program.

The institution also has a unique graduate school arrangement for the Master of Arts in Teaching degree (MAT). The program features an urban teaching internship and opportunities for meeting with foreign nationals through the Experiment in International Living.

Criteria for admission to the institution include considerations of intelligence, personality, character, health, maturity, breadth of interests, and seriousness of purposes. An official high school transcript, recommendation

from the principal or headmaster, and other references, the results of the SAT and any three achievement tests of the College Entrance Examination Board (CEEB) are also required.

After the first year, course credits are based on three hours of class and other work each week for 11 weeks. Full-time students carry from 26 to 36 quarter hours a year with a minimum of 13 for each quarter. Grades are not given for courses; however, detailed evaluations are available to students.

Admission to the teacher education program depends upon success in a first course, Introduction to Education. Before enrolling in this course, the student must complete a basic psychology course or its equivalent. All preservice students are required to complete an education block. This block includes the introductory course, theories of learning (5 quarter hours), philosophy of education (5 quarter hours), and an individual field comprehensive course, described by the institution as "an individual project that extends the study of education through self-directed effort supported by staff consultation and evaluation," (5 quarter hours).⁵

Secondary preservice students are further required to take an education core in secondary school curriculum and methods (6 quarter hours) and secondary student teaching (6 quarter hours). An attainment of three quarter hours of advanced secondary student teaching experience is also required.

The course requirements for secondary certification as required by the institution include:

Art	36	quarter	hours
Biological Science	23	"	"
English	36	"	"
Foreign Languages	30	"	"
Mathematics	27	"	"
Physical Science	32	"	"
Science (comprehensive)	68	"	"
Social Studies (comprehensive)	68	"	"

⁵These courses are taken together and are intended as a unified approach to theory and practice. Activities include observations, classroom teaching, and participation in school activities with a student teaching seminar on individual problems. The activities also include the review of problems of curriculum, classroom management, and methods of instructions in the secondary school.

Students planning to teach are encouraged to have the cooperative job involve direct contact with children before they take the education core. The institution recommends that students completing the education core take a school job. Students can receive credit toward student teaching while on such a job. Students in secondary education are strongly urged to get experience in the subject field in which they plan to teach. All students are also encouraged to pursue further work experience in a field apart from both children and education so they may broaden their understanding of the world of work. This could involve participation in community government through municipal committees, the local newspaper and other media, and other civic activities.

The institution has four full-time supervisors who visit each student teacher at least once every two weeks. Student teaching involves at least 180 actual clock hours and the number of clock hours of related education varies with the needs and abilities of the student.

Institution 4. A Small, Nonurban, Coeducational, Private College

At this institution the liberal arts are designed to provide "for general resourcefulness, leadership, and ability to solve problems on whatever level or in whatever situation." The aims of the college for its students are:

To train them in the methods of thinking and in the use of the main tools of thought

To acquaint them with the main fields of human interest and to direct them in the acquisition of knowledge therein

To guide them in the integration of knowledge

To afford them intensive training, and to encourage creative activity, within a chosen field

To prepare them for further graduate study or for starting a career after college

To establish in them the habit of continuous scholarly growth

To develop their power to enjoy and to create the beautiful

To develop their physical and mental health

To develop their moral and religious life

To prepare them for intelligent, effective, and loyal participation in the life of the family, community, nation, and international order

The general education program requires approximately 100 semester hours of work in the humanities, the natural sciences, and the social sciences. A unique feature is the January Winter Term. This four-week program is designed to encourage self-education through independent study. Participation in at least three Winter Terms is required for graduation. The topic to be studied depends on mutual agreement between the student and his faculty advisor. Group and off-campus projects are possible and all students are required to submit written evaluation reports at the end of the Winter Term. No grades are given.

Other general requirements include seven semester hours in the natural sciences, eight in social sciences, twelve in the humanities, and four in physical education. Students must also pass the CEEB achievement test in a foreign language and attend a minimum of three college assemblies during each semester of residence.

Students seeking admission to this institution must take the SAT. Additional requirements include adequate high school grades, evidence of good character and personality, leadership, citizenship, maturity, and seriousness of educational purpose.

The department of education is a part of the Division of Social Sciences. Students seeking admission to the teacher education program must be in good academic standing. They are encouraged to apply near the close of their sophomore year. A Master of Arts in Teaching program (MAT) is available. It requires a Bachelor of Arts degree with an academic major and a minimum score in the 75th percentile on the Graduate Record Examination, aptitude and advanced.

Students seeking courses in secondary education may enroll in either of two programs. One is the graduate MAT program. The other may be completed during the regular four-year undergraduate period and leads to an Ohio

secondary school certificate. To be recommended for certification, students are required to complete a course in educational philosophy (3 semester hours), educational psychology (3 semester hours), curriculum (2 or 3 semester hours), educational sociology (3 semester hours) and student teaching (5 semester hours). Students must also elect a special methods course in the major subject (2 or 3 semester hours). The placement office advises students in their certification needs and about job opportunities.

Recommendation for certification by the institution includes the following subject requirements:

Chemistry	28 semester hours		
English	24	"	"
Physical Education	26	"	"
Physics	24	"	"
French	36	"	"

Most students take the minimum requirements of 18 semester hours in education and devote the rest of their studies to the liberal arts and their subject majors.

Each undergraduate completes approximately 200 clock hours of student teaching and 25 hours of related experience. Two persons from the college supervise student teachers at least once every two or three weeks.

Institution 5. Large, Urban,
Men's Church-affiliated University

The major goal of this institution is to "foster conditions favorable for intellectual leadership." It strives to "impart a superior body of knowledge" to its students and to help them "acquire power to think clearly and penetratingly." Its liberal arts program stresses mathematics, the natural sciences, language, literature, social science, philosophy, and theology.

This institution is accredited by the NCA CSS and maintains membership in numerous educational and learned organizations.

Admission requirements include graduation from an accredited high school, recommendation from the high school principal, and submission of SAT scores.

The Bachelor's degree is awarded to students who have completed all re-

quirements for graduation and have fulfilled one year of residency. Requirements include foreign language (9 or 10 semester hours),⁶ English composition (3 semester hours), philosophy (15 semester hours), theology (12 semester hours),⁷ humanities (12 semester hours), mathematics and science (12 semester hours), social sciences (12 semester hours), and meet the certification requirements of the State Department of Education. The Graduate Record Examination, advanced test, and a comprehensive examination are also required.

The professional education program is offered in the college of arts and sciences. This college stresses "the knowledge of human activities in the past, both within and without the western tradition to furnish a frame of reference for judging wisdom of present and future acts."

All education courses are open to students majoring in any department. Recommendation for high school certification requires the completion of five subjects, including principles of education (3 semester hours), educational psychology (3 semester hours), secondary methods (2 semester hours), secondary curriculum (5 semester hours), and student teaching (6 semester hours). For teaching health and physical education, the institution further requires 6 semester hours of anatomy and 37 hours in physical education. Certification requirements and supply and demand data are available from the institution's teacher education and placement offices.

Each student must be formally accepted into the professional program before taking the first course in education. Such acceptance is given previous to student teaching. Positions available are posted on the placement office bulletin board.

This institution requires a minimum of 17 and a maximum of 20 semester hours in professional education. Other requirements are a minimum of 64 semester hours in the liberal arts, plus a subject major of approximately 40 hours.

Five college supervisors visit student teachers three to four times during the semester. Student teaching lasts from 108 to 140 clock hours and is accompanied by 20 hours of related experience.

⁶Except for students in physical education and education-science.

⁷Non-Catholic students complete only 6 hours of their choice.

Institution 6. A Large, Urban,
Coeducational, Church-affiliated University

A major goal of this institution is to prepare man for "what he must be and what he must do here on Earth in order to attain the sublime end for which he was created." The institution aims for "an academic atmosphere in which Christian principles of thought and action are the essential integrating and dynamic forces impelling the student to pursue, to cherish, and to disseminate what is true, good, and beautiful."

Admission to the school of education is made near the end of the freshman year. Responsibility for meeting institutional and state requirements for certification rests with the student. Recommendation for certification is based upon:

1. Evidence of good scholarship and character
2. Participation in planned field experiences
3. Completion of 132 semester hours in approved courses
4. Completed minimum requirements in psychology and professional education courses in accordance with the following pattern:

Nature of the Learner . . .	3	semester	hours
Growth and Development . . .	3	"	"
The Learning Process . . .	3	"	"
The Secondary School:			
Purposes and Practices . . .	2	"	"
Special Methods	2	"	"
Student Teaching	6	"	"
Philosophy of Education . . .	3	"	"

5. Twenty-four semester hours of theology and philosophy for Catholic students; 12 hours for non-Catholic students
6. Passing the National Teacher's Examination

The student teaching program includes a screening process based on the following criteria:

1. Communications skills
2. Academic standing
3. Health
4. Character
5. Completion of prerequisites

Prerequisites for candidacy for student teaching are:

1. Enrollment in the teacher education program
2. Prospective completion of the minimum residence requirement of 30 semester hours, inclusive of student teaching
3. Completion of required clock hours in observation of teaching
4. Completion of formal application

Selection and retention in the school of education are dependent upon personal recommendations, demonstrated commitment to teaching, and participation in relevant activities.

All secondary preservice students should have at least two teaching fields with a minimum of 36 semester hours in the principle field and the minimum hours listed below in a related second teaching field. Instead of two teaching fields, students may take one comprehensive field with at least 51 semester hours. Recommendation for certification includes at least the following:

Art	28 semester hours		
Biological Science	24	"	"
Bookkeeping—Basic Business	24	"	"
Earth Science	17	"	"
English	24	"	"
General Science	24	"	"
Health and Physical Education	28	"	"
History - Government.	27	"	"
Home Economics	34	"	"
Foreign Languages	24	"	"

Mathematics	24 semester hours		
Music	30	"	"
Physical Science (Chemistry and Physics)	24	"	"
Physics	24	"	"
Salesmanship - Merchandising . .	18	"	"
Speech	24	"	"
Stenography—Typing	24	"	"
Theology	24	"	"
Typing	6	"	"

Comprehensive Fields:

Art	Music
Business Education	Science
English	Social Studies
History - Government	Speech
Home Economics	Physical Science
Mathematics	

Institutional accreditations include the NCACSS and the NCATE. The institution also holds membership in numerous professional and learned societies.

Admission requires a satisfactory high school record and the results of the SAT (math and verbal). Students accepted to the institution are further required to take the English, Mathematics II, and Language achievement tests of the CEEB. Students seeking to become teachers of mathematics are required to take the Mathematics II test. The foreign language test is also required for those seeking to become foreign language teachers.

At least 120 semester hours of credit are required for the Bachelor's degree, including 56 semester hours in the liberal arts. A Bachelor of Science in Education degree may be awarded to holders of other Bachelor's degrees from the university if they complete at least 30 semester hours as prescribed by the school of education beyond the requirements of the nonprofessional degree. Each student is expected to pursue at least one major study area and to take courses in the humanities, social science, natural science, philosophy, and theology. Full-time students take courses in communication arts, English, physical education, philosophy, and theology.

The aims of the school of education are to foster "the development of those general capacities of students which flow directly from his human nature and the development of those particular capacities which enable him to become an

effective practitioner of education." All students are expected to develop professional competence in their specialized field, professional foundations, and the principles of teaching.

Students are kept informed of supply and demand data in a freshman course, "Personal and Professional Development of the Teacher." Department chairmen, counselors, and the Placement Director help keep students informed. Advice on certification and renewal requirements are provided through the school of education, the Dean's office, and through college publications and notices.

A minimum of 22 and a maximum of 28 semester hours of education courses are required. Twelve supervisors visit student teachers an average of five times per semester. Students attend campus seminars and complete at least 300 clock hours of actual teaching plus 380 clock hours of related experience.

Institution 7. A Large, Nonurban, Coeducational Public University

The stated purpose of this institution is to prepare "students for life after graduation." It attempts to give "latitude to test the validity of his own theories and philosophies and to accept responsibility through experience."

Students are encouraged to apply for admission during their senior year of high school. Applicants are required to have a high school diploma and submit the results of the SAT. Ohio residents are admitted as freshmen on the basis of a prediction of college success. Evaluation of predicted success depends upon high school grades, faculty recommendations, SAT results, and special talents. Non-Ohio residents must meet higher standards.

Freshmen are encouraged to enter the university in June and begin their studies during the Summer Quarter, especially if they need to strengthen certain academic areas. All freshmen enroll in a separate University College where their progress can be guided and they qualify for advancement to a degree college. Three additional years in one of the degree colleges constitutes the typical Bachelor's degree program. Courses in the freshman year are designed to provide broad preparation for later specialization.

Freshman students take one course in speech and physical education. All students take at least 45 quarter hours in the humanities, mathematics, and the

sciences. Full-time students are required to carry from 15 to 17 quarter hours of credit. A student of high academic standing may carry up to 20 quarter hours. After three quarters, a student may be advanced to the college or education provided he has (1) earned 45 hours of credit, (2) is not on probation, (3) has completed the mathematics requirement of high school algebra and geometry, and (4) has completed an introductory course in psychology.

The professional sequence is designed to provide "intensive preparation in the subjects to be taught and professional emphasis and focus which combine educational theory with actual practice in meeting the responsibilities of the profession." Students are prepared to teach with a liberal background and with the professional skills, knowledge, and understandings necessary for success.

The institution is accredited by the NCASSC and the NCATE. The Bachelor's degree in Education is granted upon satisfactory completion of a minimum of 180 quarter hours, including at least 36 hours in professional education. The program in secondary education is designed to prepare students to teach in any of the academic high school fields.

Application to the professional program may also be made at the end of the third quarter of the sophomore years. To make application at this time, rather than as a freshman, students must:

1. Have completed 90 quarter hours
2. Have completed a course in educational psychology
3. Satisfactorily meet the speech proficiency requirement
4. Have attained at least average grades
5. Be in satisfactory health
6. Have the recommendation of the faculty
7. Have a satisfactory report from the Personnel Office

Students seeking entrance to the secondary education program are further required:

1. to complete a course in the Analysis of Teaching, or an honors course in secondary education.
2. to show adequate progress toward completion of the 45 quarter hours of general education as required by the State certification laws.

Application for admission to student teaching has the following general prerequisites:

1. Two quarters' residence
2. Completion of at least 135 quarter hours in secondary education
3. Completion of field experience
4. At least average grades
5. Admission to Junior standing in teacher education at least one full quarter before student teaching
6. Completion of a methods course in the major teaching field and a cumulative point hour ratio of at least 2.25
7. Completion of a comprehensive major or two teaching fields
8. Completion of at least three-fourths of the work in each of the fields in which the student wishes to be certified

Most students seeking secondary certification are required to complete approximately 38 quarter hours in professional education, from 32 to 56 quarter hours in general education, and concentration in a major as follows:

Comprehensive Art	87	quarter	hours
Biology and General Science	78	"	"
Bookkeeping - Basic Business . . .	69	"	"
Comprehensive Earth Sciences . . .	82	"	"
Comprehensive English	68	"	"

History and Government (comprehensive)	68-70	quarter	hours
Industrial Arts (comprehensive) . .	100	"	"
Latin	39-51	"	"
Mathematics	68	"	"
Modern Language	56-71	"	"
Music	105-112	"	"
Physical Education	88	"	"
Physical Science	80	"	"
Comprehensive Social Studies . . .	81	"	"
Speech	72	"	"
Speech Pathology and Audiology . .	77	"	"
Fine Arts	89	"	"

An International Education Institute provides courses in comparative education. An Educational Research Center provides consultative services to area school districts and a Social Science Center helps develop in-service projects and service for affiliated schools. Other services include an educational placement bureau, counseling services, and an on-campus laboratory school.

Students are informed about teacher supply and demand and renewal requirements throughout their college careers; during freshman orientation, during admission to teacher education, during student teaching seminars, and when registering at the placement office. Bulletin board listings and private interviews are also provided.

Twenty-six supervisors visit student teachers a minimum of four times per quarter. Students are expected to complete approximately 300 clock hours of student teaching and 30 hours of related experiences.

Institution 8. A Large, Urban, Coeducational, Public University

This college is accredited by the NCATE and seeks:

1. To prepare personnel for teaching and leadership positions in a variety of educational institutions
2. To contribute to the understanding of education as a body of knowledge

3. To contribute to the development of institutional organizations, arrangements, and service systems to facilitate teaching and learning
4. To provide leadership in effecting planned change in public schools and other educational institutions

The college seeks to guide its students in the selection of learning experiences to facilitate the achievement of their educational purposes. These experiences may be sought both on and off campus.

Graduates of accredited Ohio high schools are invited to apply during their senior high school year. They are required to take the American College Test; however, no minimum percentile is required for admission. Students must maintain an average of at least 1.7 by the end of the third, fourth, and fifth quarters, or a 2.0 for the quarter with a minimum of 12 hours; 1.9 at the end of the sixth quarter, and a 2.0 at the end of the seventh or subsequent quarters to remain in good academic standing. Admission to the teacher education program requires a cumulative point hour ratio of 2.25. A "C" average in freshman English is required for admission to the Professional Division of the College of Education. Juniors and Seniors in the Professional Division must maintain a minimum average of 2.25. Students without a 2.25 average at the end of the third or subsequent quarter in the Professional Division are encouraged to enroll in a different program. Admission to the Professional Division requires completion of at least 90 quarter hours in preprofessional education.

At least 196 quarter hours of credit are required for the Bachelor's degree, with the following exceptions:

Art Education	210 quarter hours
Dance	207 " "
Music	197 " "
Combined Curricula (dual degree programs)	226 " "

Degree candidates are required to complete at least 45 hours residence credit immediately before graduation.

All Bachelor of Science in Education graduates are eligible, upon application, for a provisional teaching certificate in Ohio. The institution arranges certification after the appropriate forms have been completed by the student.

Liberal arts requirements include:

Humanities	15	quarter	hours
Social Science	15	"	"
Natural Sciences	15	"	"
Physical Education and Health	4	"	"
Option of either ROTC, mathe- matics, foreign language, or advanced level courses in any of the humanities or sciences . . .	6	"	"

All preservice students are urged to participate in school or community service during their college career. This field service is arranged by the student teaching office on a volunteer basis. Enrollment for student teaching is open only to students who have met all the requirements of their major subject area and are pursuing a degree or certification program. Approval for student teaching depends upon faculty recommendation, two quarters of residence, and good academic standing.

The secondary education program is for students wishing to teach in two or more areas or one major area and a minor area (the minor area must include a minimum of 30 quarter hours). All students are required to complete a core of professional courses including theory and practice in secondary education (5 quarter hours), student teaching (12 quarter hours), educational history (4 quarter hours), educational philosophy (3 quarter hours), health education (3 quarter hours), educational psychology (5 quarter hours), methods courses in both the major and minor teaching areas, and three electives to complete the 196 hours for graduation. The subject area qualifications to be met for certification include:

Business Education	84-85	quarter	hours
Comprehensive English	81	"	"
Foreign Language	47-49	"	"
Industrial Arts	80	"	"
Mathematics	45	"	"
Music	41	"	"
Biology	89	"	"
Comprehensive Science	80	"	"
Earth Science	85-87	"	"
Physical Science	37-39	"	"
Social Science	95	"	"
Speech	35	"	"

Students are kept informed of certification and supply and demand data through their faculty advisors, placement officers, and bulletin board information. Upon registration with the Placement Office, students are sent notices of school personnel visitations and are advised to check the bulletin boards. College supervisors visit with student teachers at least six times per quarter. Students typically complete from 60 to 90 actual clock hours of student teaching and from 150 to 220 clock hours of related experiences, depending on the number of hours' credit sought (12 to 15).

Section 5. Summary of the Major Features of Secondary
Preservice Education at Eight Ohio Institutions

Admission to the preservice program is generally precluded by admission to the institution. Criteria for admission generally include (1) graduation from a recognized high school with at least fourteen Carnegie units, including three years of English, two of a foreign language, two of mathematics, two of natural science, and two of social science,⁸ (2) completion of a standardized admissions test such as a College Entrance Examination Board test or the Scholastic Aptitude Test, and (3) a campus visit and interview.

Following acceptance, enrollment, and freshman orientation, the student begins study in the liberal arts. This generally constitutes about fifty percent of the student's time, or about two years out of the four required for the Bachelor's degree. Liberal arts or general education usually includes about 60 semester hours of course work in the humanities (philosophy, literature, music and fine arts), mathematics, natural science, social science, foreign language, English, and physical education. Church-affiliated institutions provide for additional study in theology or religion. During this period the student confers with an advisor who is a member of the faculty appointed by the institution. He helps the student select a program and authorizes that selection.

The student is evaluated, usually by letter grades which are later converted to numerical grade-point equivalents, and the courses and grades entered in a permanent transcript. Students enroll in the professional sequence before the end of their sophomore year. Admission to the program consists of (1) a review of the student's transcript, (2) good physical health, (3) good moral character, and (4) an interview. Some institutions further require the satisfactory completion of introductory or "core" education courses.

About 21 semester hours of course work are required in professional education, including

Theory and practice of secondary education	3	Semester	Hours
Cultural foundations	3	"	"
Educational psychology	6	"	"
Curriculum methods	3	"	"
Student teaching	6	"	"

⁸The minimum requirement for graduation from a recognized Ohio high school is the completion of 17 Carnegie units.

Theory and practice of secondary education is an introductory course devoted to the functions, purposes, and goals of the American secondary school. The cultural foundations provide instruction in the history, sociology, or philosophy of education. Educational psychology courses attempt to provide knowledge in child growth and development and the learning processes. Curriculum methods courses, such as Biology Teaching Methods or Methods of Foreign Language Instruction seek to provide the skills necessary for conducting classes in a given subject or field.

Student teaching assignments vary in time, place, and depth. One public institution in the sample requires as few as 60 clock hours of actual teaching and 150 hours of related experience for a total of 210 combined clock hours of student teaching work. One church-affiliated institution requires 300 clock hours of actual student teaching plus 380 hours of related experiences for a total of 680 hours of student teaching work—more than three times the amount required by the aforementioned institution. The typical student teaching requirement is approximately 180 actual clock hours of student teaching and 25 hours of related experiences for a total of 205 hours of student teaching work.

Previous to the student teaching assignment, trainees have to complete certain other requirements, such as (1) completion of three-fourths of the work in a comprehensive major or two teaching fields, (2) at least average grades, (3) enrollment in full academic standing in the preservice program, and (4) completion of prerequisites.

Student teaching is frequently accompanied by seminars, conferences, and concurrent course work. Student teaching performance is evaluated by a college supervisor who confers with the trainee and the cooperating teacher. The latter is typically paid, usually less than fifty dollars, or given a tuition voucher redeemable at the preparing institution. The evaluation tends to be more subjective than objective. It generally consists of a series of rating scales and written progress reports which include statements regarding the student's potential success as a secondary school teacher and a brief description of observed strengths and weaknesses.

Students who select a single comprehensive area are expected to devote about 60 semester hours of study to that area. Students selecting two related fields are expected to devote about 30 semester hours of study to each field. In either case the students are required to meet the certification standards of the State of Ohio Department of Education.

The liberal arts, the major subject area, and courses in professional education, provide about 120 semester hours of work leading to the Bachelor's

degree. Most institutions require a residency period of at least one academic year. Recommendation for certification is based upon: (1) completion of all requirements for graduation such as course work, satisfactory grade-point average, payment of all fees, and good moral character, (2) satisfactory completion of all requirements for certification as prescribed by the State of Ohio Department of Education, Division of Teacher Education and Certification, (3) satisfactory completion of all field work assignments, including student teaching, and (4) completion of all necessary forms.

Placement services are handled by a full-time Placement Officer who also keeps students informed about available teaching positions. This is usually accomplished through a "Placement Office Bulletin Board," or some other means. Students are required to give the Placement Officer a completed Placement Folder, a resumé of the trainee's college background, his certification credentials, demographic data, and letters of recommendation attesting to his teaching potential and character.

Some institutions provide neither placement nor certification services. Placement follow-up is considered by most institutions to be desirable, but administration and implementation of a regular program is difficult. Some institutions, however, do attempt to provide for follow-up and feedback on a biennial basis.

CHAPTER V

SOME INNOVATIVE PROGRAMS IN TEACHER EDUCATION

We trained hard—but it seemed that every time we were beginning to form up into teams, we would be reorganized. I was to learn that later in life we tend to meet any new situation by reorganizing, and a wonderful method it can be for creating the illusion of progress while producing confusion, inefficiency, and demoralization.

— Petronius Arbiter (66 A.D.)

In this chapter some examples of new and innovative programs in continuing education and in differentiated staffing will be presented. Six selected model elementary teacher preparation programs are also reviewed. These programs are illustrative of current efforts to improve teacher education and have significant implications for strengthening teacher education in Ohio. The programs selected were not regarded as the only ones with significance for Ohio. Many excellent programs exist that are equally suitable for examination and study, but only a few can be described in this report. For this reason, the present chapter is intended to serve as a starting point for further research and discussion and not as a comprehensive analysis of exemplary teacher education programs.

Continuing Education

The importance of continuing education is already apparent. In Chapter IV it was noted that nearly every teacher, administrator, and professor who responded to the Teacher Education Assessment Survey indicated that the contents of the preservice program should be extended into the continuing professional

growth of the teacher.¹ This should not be taken to mean that continuing education is simply an extension of the preservice program, rather that opportunities should be provided to improve certain skills and to learn new ones.

The major purpose of continuing education is to improve what happens in the classroom. This improvement depends upon the constant efforts of those responsible for such improvements, such as teachers, administrators, and supervisors. These people work for improvement by (1) keeping abreast of new knowledge and sharing it with each other, (2) providing and using opportunities for experimentation, innovation, and creativity, (3) helping to understand each other by communicating their role-expectations, perceived duties and responsibilities, and other variables contributing to their own individuality, and (4) by attempting to reduce or eliminate deficiencies in their own professional backgrounds.

Why these deficiencies occur in the first place is important. Sometimes it is because of preparation programs that were too short, sometimes because of programs that were not comprehensive enough, or in some other way inadequate.² The American Association of School Administrators has charged that:

Teachers are not prepared by preservice or inservice training to evaluate, select, or use the wealth of new materials now available from new curriculum studies. Different teaching procedures are called for, some quite different from any procedure now practiced by teachers. Inservice training is absolutely necessary.³

¹Students' opinions were not sought regarding which aspects of preservice should be continued after certification, or which aspects should be postponed until needed.

²C. Glenn Hass, "In-Service Education Today," in Nelson B. Henry, ed., In-Service Education (Chicago: University of Chicago Press, the Fifty-Sixth Yearbook of the National Society for the Study of Education, 1955), pp. 13-14.

³Forrest E. Conner and William J. Elena, eds., Curriculum Handbook for School Administrators (Washington, D. C.: The American Association of School Administrators, 1967), p. 317.

The deficiencies mentioned by the AASA do not always occur because of omissions in the preservice program. They can be created as new curricula emerge requiring specialized skills. Other deficiencies arise with technological development. For example, the ability to use educational television or computer-assisted instruction was not necessary before the invention of these devices. Recent research in holography, the projection of three-dimensional images through the use of coherent laser light, indicates that another technological learning tool may need to be added to the teacher's kit of skills before too long. Continuing education programs need to become more than vehicles for correcting poor preservice training.

Warren Hill, Director of the Connecticut Commission on Higher Education, said recently that teachers, like other professionals, need to maintain and improve their skills, but that the ways such maintenance and improvements are attempted often leave much to be desired.⁴

For too long, we have been lining teachers up and having them undergo courses, workshops, seminars, and institutes for the wrong reasons, usually centered around these two:

- a. We think it will be good for them
- b. They are within walking distance⁵

If programs in continuing education are to be improved, than more definite and more cooperative designs for programs must be sought. For such a search to be worthwhile, certain assumptions are necessary, including:

1. The American society and culture will continue to change, thereby creating need for continuing curriculum change
2. Preservice education cannot be expected to prepare professional school personnel completely

⁴Warren G. Hill, "The Dynamic Duo (with Apologies to Batman and Robin)," in Roy A. Edelfelt and Wendell C. Allen, eds., The Seattle Conference (Olympia, Washington: The State Superintendent of Public Instruction, 1967), pp. 10-11.

⁵Ibid., p. 11.

3. The tasks of teaching will become increasingly complex requiring the development of new skills, knowledges, and abilities
4. Continuing education programs are the vehicles through which instructional improvements can occur most effectively
5. Continuing education programs can stimulate change in the behavior of instructional personnel.
6. Continuing education programs can have measurable cognitive and affective outcomes ⁶
7. Continuing education programs can stimulate staff morale as well as professional growth
8. Successful programs in continuing education require the involvement of instructional personnel as the agents rather than as the objects of change

Harris has recently pointed out that continuing education programs fail because so many of them suffer from:

1. Inappropriate activities—selected without regard for purposes to be achieved
2. Inappropriate purposes—a failure to relate in-service programs to genuine needs of staff participants
3. Lack of skills among program planners and directors who design and conduct instructional improvement efforts⁷

⁶Benjamin S. Bloom, ed., Taxonomy of Educational Objectives, Handbook I: Cognitive Domain (New York: David McKay Co., Inc., 1956), and David R. Keathwohl, Benjamin S. Bloom, and Bertram B. Masia, eds., Taxonomy of Educational Objectives, Handbook II: Affective Domain (New York: David McKay Co., Inc., 1964).

⁷Ben M. Harris, Wailland Bessent, and Kenneth E. McIntyre, In-Service Education: A Guide to Better Practice (Englewood Cliffs, New Jersey: Prentice-Hall, Inc., 1969), p. 15.

Closely aligned with these reasons for failure are the ones described by Arnold Finch, Superintendent of the Downey, California Unified School District:

1. Unrealistic expectations in terms of teacher growth and educational outcome
2. Structuring without adequate funding⁸
3. Inability to get enough participants in needed projects or classes
4. Insufficient or incomplete communication regarding the plans, details, procedures—in short, the rules
5. Inadequate and ineffective leadership of projects and classes⁹

While teachers, administrators and supervisors may be in favor of continuing education programs, many obstacles bar their success. The following case study illustrates how some of these obstacles become a spawning ground for more problems.

Individualization of In-Service Program Stevens Point, Wisconsin¹⁰

Four neighboring school districts cooperated to improve the continuing education programs for their teachers. "Title III: Tele-writer" was set up as a system whereby the four participating districts could identify their own specific in-service needs and have them filled on an individualized basis by experts in the field.

⁸Without the availability of Federal funds, all continuing education programs currently coordinated by the State of Ohio Department of Education would be virtually nonexistent.

⁹Arnold Finch, Growth In-Service Education: Programs that Work (Englewood Cliffs, New Jersey: Prentice Hall, Inc., 1969), p. 53.

¹⁰Adapted from "In-Service Education," PACE report (Owensboro, Kentucky: Owensboro City Schools, April, 1968), pp. 26-30.

The system consisted of an electronic remote blackboard combined with a closed-circuit telephone line. The sending equipment was located in a central Campus School. Receiving stations were set up in each of the four districts. This meant that neither the lecturer nor the teachers had to travel far to accomplish their goals. The lecture could be heard in all four districts simultaneously. If diagrams or other graphic materials were necessary, an electro-writer was used. This was a remote-operated overhead projector which put an image on a wall or screen. A special stylus was necessary. The remote blackboard helped to offset the absence of the lecturer. The other piece of equipment was a telephone line enabling the listener(s) to react to the lecturer.

Wausau was the largest district of the four. The others were Mosinee, Rothschild-Schofield, and Antigo. Previous to the Title III grant, the districts had to be very careful in their selection of in-service programs in order to gain the most from their limited funds. This resulted in very general programs that were mostly appropriate for large groups. Individual teachers' needs had to be overlooked, even though those who coordinated the programs regretted doing so. The Tele-writer Project has enabled the districts to solve this problem.

Each district had a special In-Service Training Committee responsible for identifying the individual needs of the teachers. This information was channeled to a Project Director who located a qualified person to speak on the chosen topic. "If only the one teacher attends the session, the purpose of the project has been fulfilled, because that individual has had an opportunity to fill a knowledge gap, gain additional information, or solve a difficult problem."¹¹

An important factor contributing to the success of the project, according to the PACE report, was that the sessions were conducted during the regular school day, not before the teachers "were even awake, or after school when they were half dead...."¹² Paraprofessionals were used to free teachers to attend the sessions.

By the end of the 1968-1969 school year, approximately 175 hours of continuing education were provided in 15 different subjects by 48 different experts.

¹¹Ibid., p. 27.

¹²Ibid.

Two other phases were incorporated into the project. One was the identification and training of future school administrators. The other was concerned with curriculum evaluation and improvement. Some of the problems to be surmounted included:

1. Selecting and installing the necessary equipment
2. Locating the equipment for most efficient use
3. Organizing teachers' schedules to allow for in-service education during the regular school day
4. Maintaining the equipment
5. Orienting the staff to the project and use of the equipment
6. Evaluating how the program influenced learning in the classroom. "Post-Meeting Reaction Sheets and Post-Series Reaction Sheets are completed by the participants to evaluate the Telewriter meetings" ¹³

Other problems were unsolved, including:

1. The need for convenient scheduling to allow for in-service education during school hours
2. Lack of time for the teacher-technician to care continuously for the equipment
3. Teacher reluctance to interact through the media
4. The difficulty of evaluating the program's effect upon the pupils in the classroom
5. The fact that conscientious teachers feel guilty about leaving their classes to attend the sessions

¹³Ibid., p. 29.

6. The fact that some teachers regard session attendance as a burden on their already-too-short-school-day rather than as an opportunity to fulfill their own expressed needs.

The first two of the "unsolvable" problems in the Stevens Point program are managerial. Solutions could lie in the reorganization of the schedule and in the provision of additional staff time. The latter four problems are attitudinal. Answers to them are not likely to be easily found in added resources, finances, personnel, or facilities. Teachers who are reluctant to interact through—or with—electronic devices may be adamant.

Sometimes, if attitudes are developed in certain ways, the results can be more positive. For example, Bush developed a technique for preparing student teachers through the use of videotape equipment.¹⁴ The technique is called microteaching and began as part of a search for an experimental pre-service program at Stanford University. Microteaching is a scaled-down lesson in which the trainee teaches for approximately five minutes to a small group of about five children. The trainee attempts only a small task, such as giving an assignment. Microteaching is "real" to the extent that the children are not actors and the lesson is a part of their regular school day. After the lesson is completed the trainee and his fellows and supervisor view an "instant replay" of the videotaped lesson. The lesson is analyzed and suggestions for improvement are offered. The trainee immediately reteaches the same lesson to a different group and the cycle repeats. Research is still being conducted in microteaching at the Research and Development Center in Teaching at Stanford.

Some of the findings at the Stanford Center have been applied to the continuing education of teachers. The Far West Laboratory for Educational Research and Development has established three-week "minicourses" involving "minilessons" in the use of videotaping for improving teaching skills. Research by the Laboratory has shown that forty-eight teachers "were enthusiastically in favor of the microteaching approach."¹⁵

¹⁴Robert N. Bush and Nathan L. Gage, "Centers for Research and Development in Teaching," Journal of Research and Development in Education (Vol. 1, No. 4, Summer, 1968), pp. 86-105.

¹⁵"Teaching Teachers," Research and Development: Advances in Education (Washington, D. C.: U.S. Government Printing Office; 1968-0-312-662, November, 1968), p. 32.

The microteaching approach has demonstrated that reluctance to use electronic devices can be considerably reduced, if not eliminated. Other attitudinal problems can be resolved through more active involvement between consultants and participants. Culbert and Schmidt¹⁶ found that when the audience group is moved from the position of "observer" to the role of "participant," greater learning takes place. Schmuck, Runkel, and Langmeyer,¹⁷ reporting their research in an award-winning article, found that school instructional and organizational improvements were most likely to occur when teachers were trained according to a problem-solving approach involving the development of interpersonal communications skills:

Three groups formed, each to work through a problem solving sequence...consisting of five steps: (a) identifying the problem through behavioral description, (b) diagnostic force-field analysis, (c) brainstorming to find actions likely to reduce restraining forces, (d) designing a concrete plan of action, and (e) trying out the plan behaviorally through a simulated activity involving the entire staff. Each of the three groups carried through its sequence of steps substantially on its own; the trainers served as facilitators, rarely providing substantive suggestions and never pressing for results.¹⁸

The consultants' role-relationship to the program participants also has a substantial impact on the success of any workshop. Investigations conducted

¹⁶Samuel A. Culbert and Warren H. Schmidt, "Staging a Behavioral Science Learning Experience: Transforming Observers into Participants," Journal of Applied Behavioral Science, (Vol. 5, No. 3, July-August-September, 1969), pp. 337-349.

¹⁷Richard A. Schmuck, Philip J. Runkel, and Daniel Langmeyer, "Improving Organizational Problem Solving in a School Faculty," Journal of Applied Behavioral Science, (Vol. 5, No. 4, October-November-December, 1969), pp. 455-482.

¹⁸Ibid., pp. 460-461.

at the Educational Research Council of America support this hypothesis.¹⁹ In the spring of 1970, 2,500 teachers and administrators in 28 school systems were surveyed to determine how continuing education workshops can be improved. The respondents indicated that workshops could be substantially improved if the consultants would:

1. Present only a small amount of material at one time
2. Keep on the topic to which they had been asked to address themselves
3. Help teachers find answers by giving more direction and practical suggestions instead of quoting theoretical and abstract research
4. Attempt to make presentations in creative and innovative ways
5. Be enthusiastic and inspirational

The ERCA survey also showed that workshops could be better if:

1. Greater care were taken in organizing and scheduling the programs
2. Facilities were more carefully selected to be conducive to the workshop activities
3. Discussion groups were kept at a size appropriate for accomplishing the activity or task
4. All those who were supposed to participate were compelled to do so

¹⁹"Why Workshops and Seminars Fail," (Cleveland, Ohio: Educational Research Council of America, Department of In-Service Education, unpublished paper, 1970).

5. The equipment worked when it was supposed to²⁰

Hone and Carswell²¹ suggest that a steering committee be set up to act as feedback liaison between the consultants and the workshop participants. This feedback would ensure that teachers would be provided with the experiences they felt they needed. Other suggestions were (1) to have four-hour sessions built around a meal break, (2) ask participants to prepare for the workshop by reading available advance materials, and (3) avoid presenting too much material at one time.

Two examples of continuing education programs that seem to be incorporating some of the foregoing suggestions and findings are the State of Ohio Special Education Instructional Materials Center (SEIMC) Network²² and the Right-to-Read Program.²³

The SEIMC

Since 1967, the State of Ohio Department of Education, Division of Special Education, has cooperated with the Regional Instructional Materials Center at Michigan State University to provide consultant services to Ohio's schools. During this time it was found that:

1. The instructional materials center (IMC) is helpful in educating handicapped children

²⁰Murphy's law states that if something can go wrong, it will. A corollary to this law states: A delicate transistor protected by a fuse in an ETV receiver will protect the fuse by blowing first.

²¹Elizabeth Hone and Evelyn M. Carswell, "Elements of Successful In-Service Education," Science and Children (Vol. 6, No. 5, January-February, 1969), pp. 24-26.

²²Division of Special Education, "Ohio State Plan for a Special Education Instructional Materials Center Network," (Columbus, Ohio: State Department of Education, mimeographed, n.d.).

²³Virginia M. Lloyd, "Planning the Right-to-Read Program," (Columbus, Ohio: State Department of Education, Division of Elementary and Secondary Education, mimeographed, n.d.).

through the continuing education of teachers

2. The IMC is regarded as acceptable and desirable by special education teachers
3. Special education teachers:
 - a. usually select their own materials
 - b. require professional assistance in this selection
 - c. want to see the materials and have them demonstrated
 - d. are reluctant to travel far to get consultant help
4. The study and use of instructional media has been stimulated by Federal programs and the national network of centers

It became clear the SEIM Centers had to be more conveniently located, as in the local school districts, if teachers were to get maximum benefit from them. A coordinated network of these centers could provide more effective development of meaningful achievements and services.

In 1970, the Ohio SEIMC Network had 12 regional centers serving 260 school districts in 33 of the state's 88 counties and covered 60 percent of the state's program for the educable mentally retarded. The smallest center covered a portion of one county and the largest spanned eight counties. Each center was designed to serve a school population-base of 100,000 students. Figure 6 shows the location of the twelve centers and the areas they served.

The major goal of the network was to improve the education of all handicapped children in Ohio and to the people concerned with their education. The specific objectives for the centers called for increased teachers' knowledge relative to materials available, how to select and use them, how to determine which materials are appropriate for which student needs, how to achieve instructional objectives effectively through the use of such materials, and how to evaluate their effectiveness.

The project was funded under ESEA Title VI-A. Each regional center had a coordinator, a secretary, and a governing board of superintendents and other school representatives. These boards were designed to operate according to guidelines established by the Division of Special Education.

Figure 6 - Location of the Network of Twelve Title VI Ohio Special Education Instructional Materials Centers, 1970^a



^a Source: Samuel J. Bonham, State of Ohio Department of Education, Division of Special Education.

Seven of the centers began operating in the spring of 1969. The remaining five began the following September. Facilities included university campuses, private office buildings, board of education offices and schools.

Center materials were organized and cataloged according to the Ohio Cataloging and Information Retrieval System, a card system which classifies materials according to curricular area, interest, achievement level, and skill area. This system can be computerized at some future date. Card processing is done at a central location.

The major use of the regional centers is for continuing education programs for teachers of handicapped children. Activities include meetings, workshops, group and individual conferences, demonstrations, exhibits, and consultations. The activities were conducted in the local school districts and the materials for the activities were made available through the regional SEIMC's.

Three types of foci characterize the IMC's. One type has a teacher focus and attempts to serve special education teachers in the area through group programs and individual conferences. These centers are located in rural areas having little program and no supervisory staff.

In urban areas, where well-developed special education programs already exist, the centers have a program focus. Here program needs are identified and instructional strategies developed. These centers work closely with local school district supervisors.

The third focus is on teaching strategy. These centers are similar to program focus centers in that they depend upon local leadership for successful operation. The difference is that these centers serve to support and maintain programs that are already operational. The center helps by providing instructional materials relating to these ongoing programs.

The Michigan SEIMC is a teaching strategy center. Its support role to the Ohio program is seen as:

1. Developing training packages and programs for continuing education to be used by coordinators
2. Information retrieval adding evaluation information to abstracts and utilizing skill descriptors
3. Developing a bank of instructional objectives for special education

4. Developing instruments to evaluate the effectiveness of materials and programs
5. Acting as a clearinghouse for results of the "mini" research studies utilizing materials and their dissemination

Center personnel also conduct "ministudies" or short courses in the special education classrooms in their respective regions. Teachers learn to use the materials to achieve specific instructional objectives for handicapped children.

Field testing procedures are used to help determine the effectiveness of the materials. Evaluation instruments have been developed and are completed by the teachers who use them.

During 1969-1970, consultant services included assistance with program planning, management, and evaluation. To provide these services, personnel from the State Department's Division of Special Education:

1. Planned and provided leadership activities for teachers working with handicapped children through a continuing education program concerning program planning, management, and evaluation
2. Helped SEIMC coordinators, governing boards, and school districts to develop behavioral objectives which could have a direct impact on the improvement of education for handicapped children
3. Helped SEIMC coordinators and governing boards evaluate the effectiveness of the program
4. Suggested ways to improve the program
5. Disseminated information about project activities to agencies concerned with special education
6. Coordinated new continuing education programs in management, evaluation, special education, and related areas with other agencies (public,

private, university) which have the necessary capacity

Future plans for the Ohio Special Education Instructional Materials Center Network include:

1. A continuing expansion of the network at the end of the 1970-1971 school year if the project is successful, with fifteen to twenty centers to be established
2. Establishment of standards for future IMC's to cover:
 - a. qualifications and number of staff
 - b. physical facilities
 - c. budget
 - d. area served, considering geography, student population, and special education program
 - e. program activities
3. Funding as part of Ohio's present school foundation program (state aid)
4. Inclusion of IMC in Instructional Resource Centers to encompass expanded activities including
 - a. coordination of an ongoing research and development program
 - b. program evaluation
 - c. additional staff to provide expanded services
 - d. development of new and innovative special education programs
 - e. computer services
 - f. implementation of new methods
 - g. establishment of a single statewide coordinating center

The newness of this program allows many opportunities for early teacher involvement, strategic planning and organizing, and careful evaluation. Similar

opportunities exist for the even newer Right-to-Read Program.²⁴

The Right-to-Read Program

This program was established in accordance with a statement made by James E. Allen, Jr., then Assistant Secretary for Education and U.S. Commissioner of Education. Allen, speaking before the General Subcommittee on Education, Committee on Education and Labor, in October, 1969, pointed out that more than one quarter of the U.S. population cannot read or their reading skills are so meager as to limit their entire life development. "For these people," said Allen, "education has been a failure." They have been denied "a right as fundamental as the right to life, liberty, and the pursuit of happiness—the right to read." Allen requested that the U.S. Office of Education begin an immediate nationwide attack to eliminate this failure.

It is my belief that we should immediately set for ourselves the goal of assuring that by the end of the 1970's the right to read shall be a reality for all—that no one shall be leaving our schools without the skill and the desire necessary to read to the full limits of his capability.

This is education's "moon"—the target for the decade ahead. With the same zeal, dedication, perseverance, and concentration that made possible man's giant step of last July 20, this moon too can be reached.²⁵

Acting on this request, Virginia Lloyd, Chief of the Elementary Section of the Division of Elementary and Secondary Education of the State of Ohio Department of Education, proposed the following goals for an Ohio Right-to-Read Program:

1. To improve reading instruction in all grades,
K-12

²⁴Ibid.

²⁵James E. Allen, Jr., Speech before the General Subcommittee on Education, Committee on Education and Labor, House of Representatives, Wednesday, October 8, 1969, 11:00 a.m. EDT.

2. To apply diagnostic teaching methods to provide valid and effective learning experiences for all students, regardless of ability; i.e., providing rehabilitation, developmental, and remedial reading programs
3. To teach reading in a meaningful and significant relationship to all aspects of language development; i.e., listening, speaking, reading, writing, and thinking
4. To select and use a variety of multilevel materials to meet the learning needs and interests of students
5. To establish a cooperative relationship with parents to help them understand the reading process and to learn how they can help their children
6. To provide for the diagnosis and treatment of reading problems ranging from light to severe
7. To strengthen early childhood learning opportunities
8. To develop creative experimental programs to reach identified problems existing in the schools and communities

The proposal recommended that a statewide Right-to-Read program be established. First, an assessment of students' actual competencies and learning needs in terms of the instructional methods and materials being used in reading was to be conducted. The second task was to assess the resources, identifying master teachers who could serve as leaders and who would maintain a working knowledge of available learning materials and related research in the field of reading. The third task was the development of long- and short-range goals and objectives for reading improvement. Experimentation and the analysis of alternative solutions would constitute the fourth task. Finally, working patterns and procedures would be established.

This approach to reading improvement would require a team effort involving

children, their parents, and the professional educators. Lloyd suggested that cooperation be encouraged through the involvement of volunteers, such as retired teachers, future teachers, older bright pupils, and retired laymen to serve as readers. Parental education in methods might be attempted through discussion groups, demonstrations of home tutoring, sessions to make home learning materials, and P.T.A. programs.

Of the many causes of reading deficiency, teaching was regarded as the component about which the most could be done. Teachers were to be extensively involved in all phases of the program, especially in the assessment phase. Teachers were expected to analyze their own skills, techniques, and attitudes in the teaching of reading.

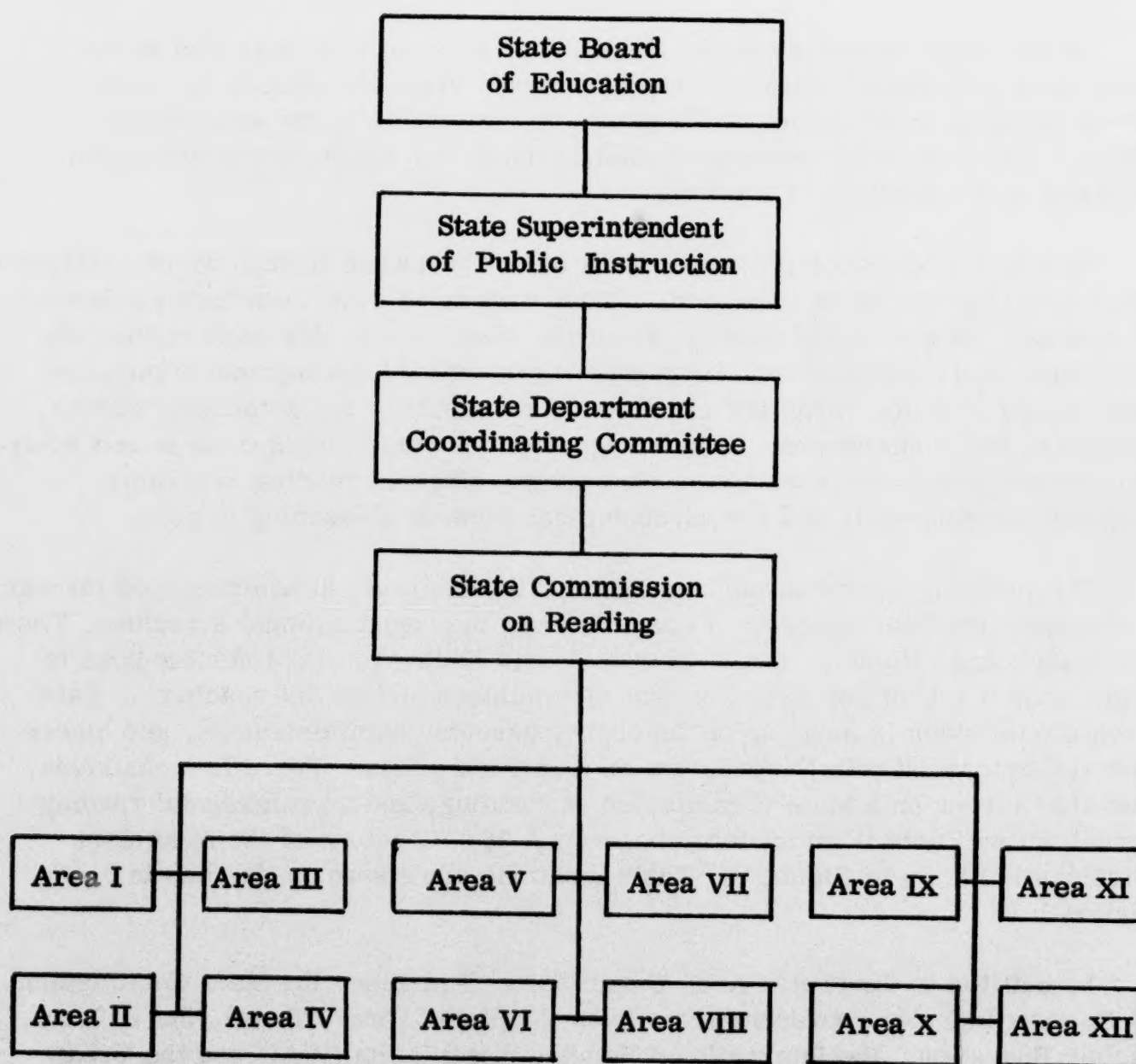
Continuing education programs were to be the means through which children's reading ability was to be improved. These programs were to include professional reading, the use of multimedia, lectures, discussions, demonstrations, observation, and participation. Suggested organizational arrangements included individualized study, large and small group discussions and seminars, clinics, meetings, and conferences. Topics suggested for study included basal text study, enrichment programs, resource center usage, directed reading programs, language development, and the psychological aspects of learning to read.

The project, funded through an ESEA Title III grant, is administered through a statewide regional pattern. Figure 7 shows the organizational structure. There are twelve Area Right-to-Read Commissions. Each Area Commission span is based upon a school population of 500,000 children and 25,000 teachers. Each Area Commission is made up of teachers, parents, administrators, and others who are concerned with the program on a regional basis. There is a chairman, who also serves on a State Commission on Reading, and a professional reading consultant who acts in an advisory capacity. The structure of the Area Commissions is shown in Figure 8. Their locations are shown on the map in Figure 9.

In addition to the twelve Area Commission Chairmen, the State Commission on Reading includes representatives from the State Library Board, the P.T.A., Higher Education, the International Reading Association (IRA), and the Urban Commission. This State Commission is coordinated by a seven member State Department Coordinating Committee. This committee includes state division chairmen and administrators. As of late summer, 1970, the Area Commissioners were beginning to establish procedures for conducting the assessment phases of the project.

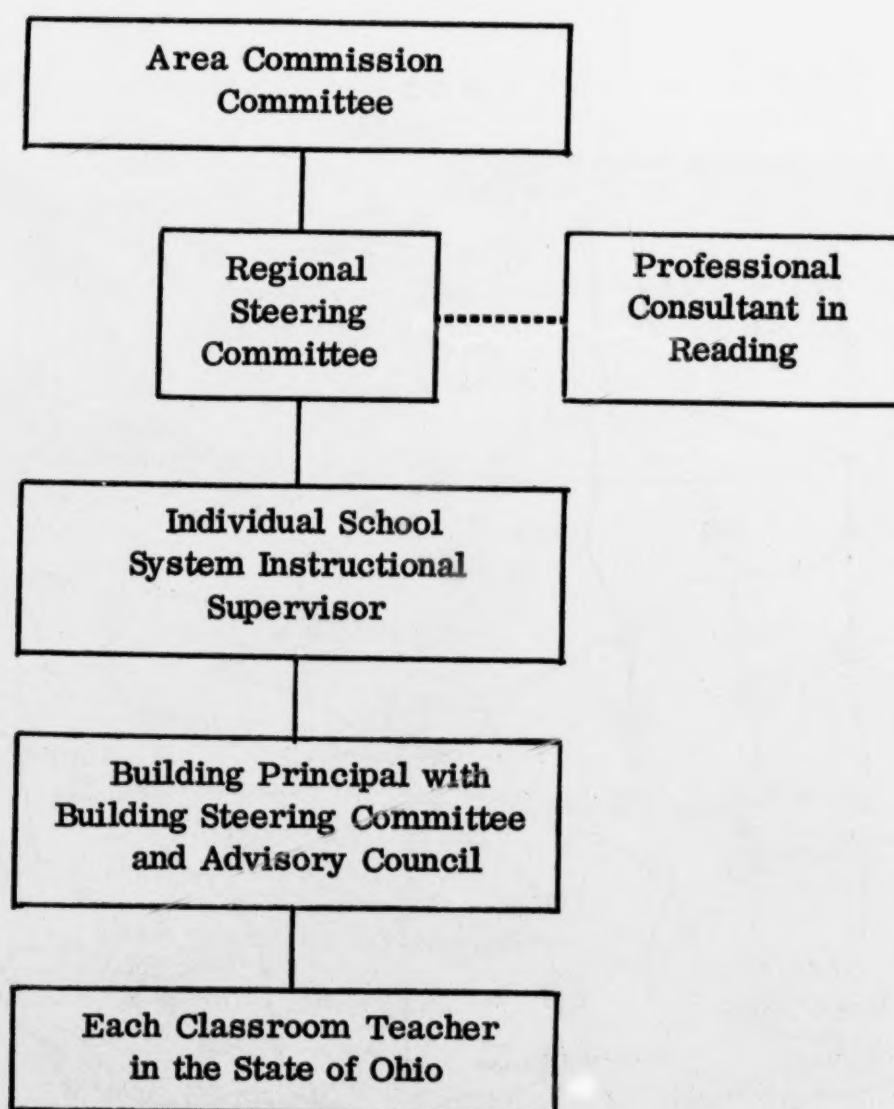
Each commission is expected to develop its own program of continuing edu-

**Figure 7 — Organizational Pattern for the State of Ohio
Right-to-Read Program^a**



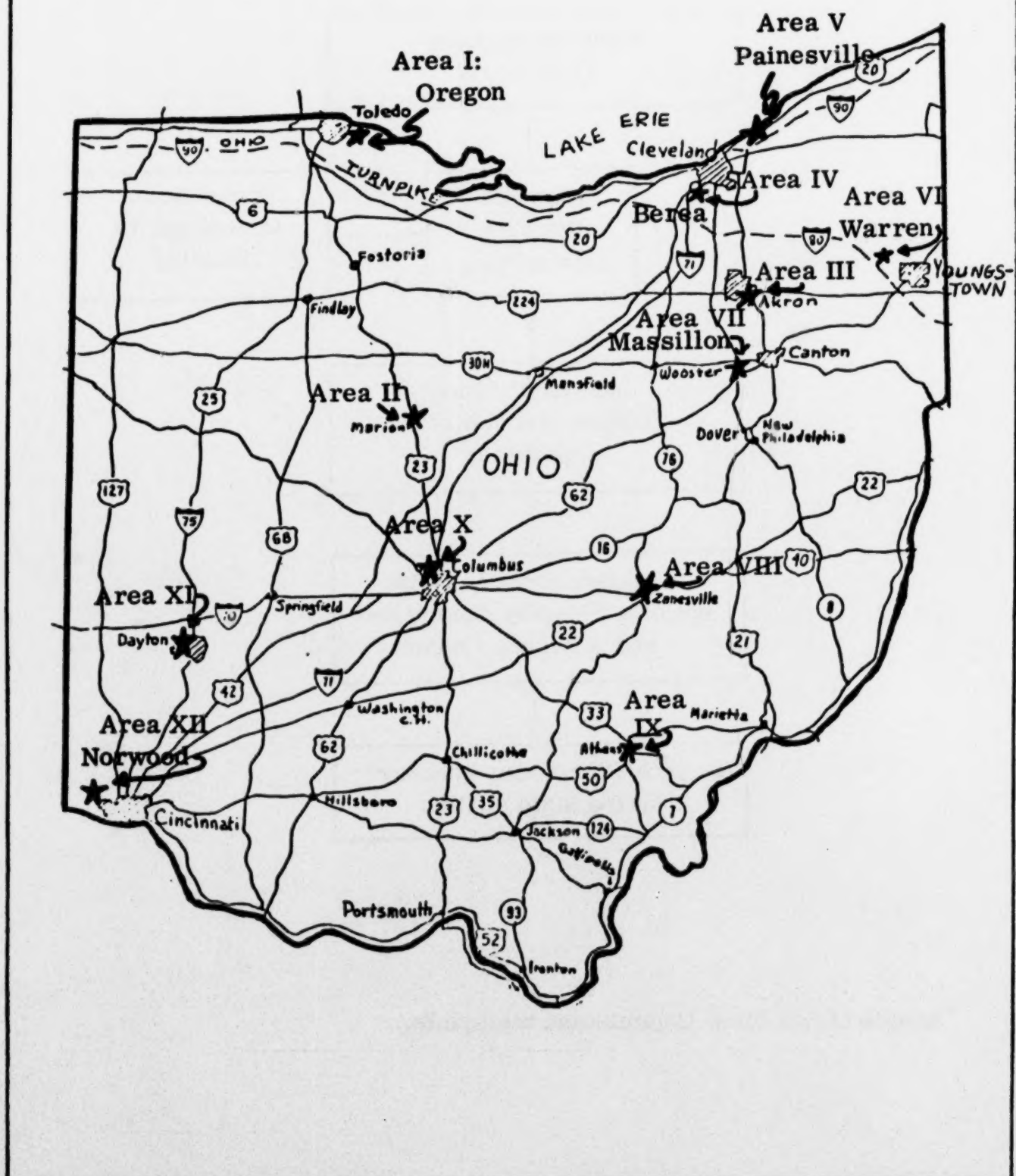
^aAdapted from State Commission materials.

**Figure 8 — Area Commission Organization Pattern,
State Right-to-Read Program^a**



^a Adapted from State Commission materials.

Figure 9 — Location of the Area Commissions of the State of Ohio
Right-to-Read Program



cation according to the goals and objectives of the Right-to-Read Program. For example, Dean Kelly, Area IV Commission Chairman in Berea, explained that "after exemplary reading programs are identified and model teachers selected, demonstration classes can be set up. In this way excellent teachers in several school systems can serve as cooperative resources for interschool coordination."

Many continuing education programs are conducted by colleges and universities. Some are designed to develop more competent teacher trainers, such as the U.S. Office of Education's Triple T project: Training the Teachers of Teachers. According to Donald Bigelow, Director of the new Division of College Programs at the U.S.O.E.'s Bureau of Educational Personnel Development, "Triple T is a program to develop a more effective relationship between teacher education and the total university and to relate this effort more closely with the needs of the school system where the teacher serves."²⁶ Triple T programs began in four universities: Georgia, U.C.L.A., Michigan State, and Hunter College of the City University of New York. By 1970, through the Education Professions Development Act, many programs were in operation, such as the pilot project at Cleveland State University.

The Triple T programs at these and other institutions represent an effort to coordinate those portions of the education community concerned with pre-service and continuing education, including colleges of education and liberal arts, graduate schools and the school districts. The objectives of these programs are established as:

1. To create a closer relationship between subject matter content, teaching methods, and the schools
2. To identify major problems encountered by the trainers of teacher trainers, for example, convincing college administrators that good teaching is just as important as scholarship
3. To identify people and institutions willing to assume responsibility for the preparation of educational personnel as a joint effort between the universities and the schools

²⁶Donald Bigelow, quoted in Paul A. Olsen, "Training the Teachers of Teachers," American Education (February, 1969), p. 7.

4. To establish a pattern of career development for teacher educators

While the Triple T programs have attempted to demonstrate that preservice and in-service ought to be part of a continuing strand of teacher education, many institutions prefer to conduct programs designed specifically for the in-service or continuing education level.

According to recent data, at least five continuing education programs are being offered by universities in Ohio. The Ohio Council on Teacher Education²⁷ describes three vocational education in-service programs being conducted by Kent State University and two by the University of Toledo. As an illustration, Toledo's College of Education offered a summer institute for teachers and counselors who work with disadvantaged vocational education students. The program sought to provide students with an opportunity to develop "more appropriate attitudes toward work and its prerequisite educational requirements."²⁸ The objectives of the institute were to help teachers and counselors to (1) understand the importance of the teacher in developing positive attitudes in students toward the world of business, (2) cooperate with other school staff in orientation and exploration experiences, (3) become familiar with the related learning materials, (4) reinforce basic vocational work attitudes, and (5) develop appropriate work experience opportunities.

Public schools frequently conduct their own continuing education programs with local funds. Local supervisors work with teachers to identify weaknesses in instructional areas. These supervisors then coordinate the necessary facilities, materials, and resource persons to implement improvement programs. A brief example of one such program was the Cleveland Heights Plan for Curriculum Study as recently described in a Phi Delta Kappa publication:

Under the guidance of administrators and supervisors, teachers...embarked on a program of curriculum study as part of in-service training. The plan is to study one curriculum area each year, the first one being science. A curriculum committee for science was appointed, drawing teachers from all schools.

²⁷Ohio Council on Teacher Education, Innovation and Change in Ohio Teacher Education (Columbus, Ohio: The Council, 1970), pp. 126-130.

²⁸Ibid., p. 128.

Under the direction of this Committee all teachers meet in their own schools one afternoon a month for study. Group meetings of the several schools are also held.²⁹

Under this plan, begun in 1959, the school district has followed up on eleven other areas, including arithmetic, language arts, social science, physical education, and special education. Such programs can be difficult because of lack of adequate funds, lack of sufficient planning time or facilities, and the scarcity of resource people to present a comprehensive program.

The State Department of Education has worked to encourage continuing education in the local districts by providing consultant help, guidance, and organizational assistance. The State Department also works with colleges and universities, the schools, and with other research organizations in the development of guidelines for such programs. For example, the 1968 minimum standards for Ohio high schools have two statements directly concerning continuing education:

Provisions shall be made for a continuing in-service education program in which all staff members shall participate annually. Each building principal shall maintain records of teacher in-service education participation.³⁰

The members of the entire staff shall participate in appropriate and effectively organized in-service activities each year.³¹

To help maintain these guidelines, the State Department of Education has issued a series of slides and brochures on the subject.³² These brochures describe

²⁹Berlie J. Fallon, Fifty States Innovate to Improve Their Schools (Bloomington, Indiana: Phi Delta Kappa, 1967), item 532.

³⁰State of Ohio Department of Education, 1968 Minimum Standards for Ohio High Schools (Columbus, Ohio: The Department, 1968), p. 15.

³¹Ibid., p. 20.

³²Cf.: "Accent on In-Service Education," a tri-fold brochure available from the State Division of Elementary and Secondary Education, Columbus, Ohio.

the role of the school system as providing leadership, facilities, growth situations, resources, and time. Teachers are expected to contribute ideas, effort, enthusiasm, and time.

Time for a minimal program in continuing education is assured by law. The Ohio Revised Code provides for two paid professional study days for a 182-day school year.³³ One of these days is typically devoted to attendance at the regional convention of the Ohio Education Association, such as the Northeast Ohio Teachers Association Conference held in Cleveland each fall. The other day is frequently used for local professional meetings, attendance at a "Spring Drive-in Conference," or individual work on some teaching project or task.

Some Comments on the Teacher and Continuing Education

It was pointed out earlier that some teachers, supervisors, and other instructional personnel are reluctant to accept, support, or even participate in continuing education programs. Research has shown that different types of teachers could have any number of reasons for feeling this way.

Some teachers may feel insecure as adults and want to relive their childhood. Research by Dilley,³⁴ Stern,³⁵ and Fuller, Pilgrim, and Freeland³⁶

³³Ohio Revised Code, Chapter 3317.01(B).

³⁴N. E. Dilley, "Personal Values held by College Students Who Enter a Teacher Education Program," Journal of Teacher Education (Vol. 7, No. 3, 1957), pp. 289-294.

³⁵G. G. Stern, "Measuring Noncognitive Variables in Research on Teaching" in Nathan L. Gage, ed., Handbook of Research on Teaching (Chicago: Rand McNally, 1963), pp. 398-477.

³⁶Francis F. Fuller, Geneva H. Pilgrim, and Alma M. Freeland, "Intensive Individualization of Teacher Preparation," in Mental Health and Teacher Education (Washington, D. C.: Forty-Sixth Yearbook of the Association for Student Teaching, 1967), pp. 151-187.

suggest that teacher trainees may have a need to identify and affiliate with children in an effort to overcome their own childhood frustrations. Some teachers may harbor a need to dominate and subjugate others. For example, Rokeach³⁷ and Rabkin³⁸ found that in-service teachers tended to be dogmatic. Walberg's review of recent literature revealed that some teachers become more self-deprecating, hold lower aspirations for their students and themselves and have less rapport with their students as they gain in experience.³⁹ Walberg also noted that those who persisted in teaching tended to become less interested in books and their subject matter.⁴⁰ These data suggest that veteran teachers may be low in self-esteem as a result of unresolved personality-role conflicts. That such conflicts occur has been reported by several researchers, including Getzels and Jackson,⁴¹ Linden and Linden,⁴² and Henjum.⁴³ Henjum, for example, concluded that

...whenever possible, teachers who have socially well-adjusted, participating, and

³⁷Milton Rokeach, The Open and Closed Mind (New York: Basic Books, 1960).

³⁸Leslie Y. Rabkin, "The Dogmatism of Teachers?" Journal of Teacher Education (Vol. 17, Spring, 1966), pp. 47-49.

³⁹Herbert J. Walberg, "Professional Role Discontinuities in Educational Careers," Review of Education Research (Vol. 40, No. 3, June, 1970), pp. 409-420.

⁴⁰Ibid., p. 414.

⁴¹Jacob Getzels and Philip W. Jackson, "The Teachers' Personality and Characteristics," in N. L. Gage, Handbook of Research, pp. 506-582.

⁴²Kathryn W. Linden and James D. Linden, "A Longitudinal Study of Teachers' Attitudes and Personality Characteristics," Journal of Teacher Education (Vol. 20, No. 3, Fall, 1969), pp. 351-360.

⁴³Arnold W. Henjum, "A Study of the Significance of Student Teachers' Personality Characteristics," Journal of Teacher Education (Vol. 20, No. 2, Summer, 1969), pp. 143-147.

imaginative personality patterns should be selected for junior high school, and intelligent prospective teachers who have personality patterns that indicate a general lack of social adjustment should be guided into senior high school teaching.⁴⁴

A now classic study by Guba, Jackson, and Bidwell⁴⁵ showed that veteran teachers tended to be more deferent, orderly, and patient, and less exhibitionistic, dominant, and heterosexual than college students. Veteran teachers tended to have "meek" needs dispositions, and the more they fulfilled their role-expectations as perceived by their principals, the more effective they were considered to be and the less likely they were to feel satisfied.

Hughes found that teachers need to influence others and that they exercise their power in different ways.⁴⁶ Research conducted by Webster⁴⁷ revealed a high correlation between the methods used by teacher trainees to control pupils and the methods their parents used with them when they were children, including affection and inclusion. Wright and Tuska⁴⁸ found that female high school teacher trainees were frequently disappointed in both their parents and sought affiliation with their teachers as models for identification. Future male

⁴⁴Ibid., p. 147

⁴⁵Egon Guba, Philip W. Jackson, and C. E. Bidwell, "Occupational Choice and the Teaching Career," Educational Research Bulletin, (Vol. 38, 1969), pp. 1-12.

⁴⁶Marie Hughes, "Utah Study of the Assessment of Teaching," in Arno Bellack (ed.), Theory and Research in Teaching (New York: Teachers College, Columbia University, 1963), pp. 25-36.

⁴⁷Staten W. Webster, "Parental Antecedents of Teacher-to-Pupil Behaviors: A Study of Identification," Journal of Experimental Education (Vol. 32, Summer, 1964), pp. 389-394.

⁴⁸Shirley Tuska and Benjamin Wright, "The Influence of a Teacher Model on Self-Conception During Teacher Training and Experience," Proceedings of the 73rd Annual Convention of the American Psychological Association (Washington, D. C.: The Association, 1965), pp. 297-298.

high school teachers tended to be unable to identify successfully with their fathers and sought out teachers for their masculine models. Sometimes teachers are frustrated because their own role-expectations are in conflict with those held by the school.⁴⁹

These studies indicate that some people seek the rewards of teaching to satisfy a need to relive childhood, or a need to dominate others, or a need for the security of the classroom. Others find their way into teaching to satisfy other personal needs.

Many teachers are rewarded by knowing that they have helped others to grow. Considerable evidence exists that some teachers are rewarded by the way students respond to their behavior. For example, students who behave certain ways make the teacher feel good professionally as well as personally. When students are attentive and interested in what the teacher is saying, he feels rewarded. When a student stops to say, "You're the most wonderful person I've ever met," or "Some day I want to be a teacher just like you," the teacher is rewarded. When a parent writes a complimentary note or when a half-dozen of his students win scholarships or awards, the teacher is rewarded.

Maslow's needs hierarchy suggests that teachers who seek affection, belongingness, affiliation, prestige, and recognition have not yet satisfied their needs in these areas.⁵⁰ Their teaching behaviors are motivated by their desire to satisfy the love and esteem needs: needs which must be satisfied before they can be motivated by intellectual curiosity, creative love, or cognitive control. People seeking rewards in these latter dimensions are self-actualizing.

Implicit in this needs hierarchy is that most teachers teach because they enjoy the reward of having someone else learn something as a direct outcome of what they, the teachers, do. This is rewarding because it satisfies a need

⁴⁹Cf.: James G. Anderson, Bureaucracy in Education (Baltimore, Maryland: Johns Hopkins Press, 1968); Philip W. Jackson and F. Moscovici, "The Teacher-to-be: A Study of Embryonic Identification with a Professional Role," School Review (Vol. 71, 1963), pp. 41-65; and Chandler Washburne, "The Teacher in the Authority System," Journal of Educational Sociology, (Vol. 30, May, 1957), pp. 390-394.

⁵⁰Abraham Maslow, Motivation and Personality (New York: Harper and Co., 1954).

for recognition. If no student recognized how the teacher's effort made possible his accomplishments, if no one ever expressed or showed a "light bulb" of insight, teaching may not be as rewarding as it is.

It is assumed that some teachers work not only for financial reasons, but for the intrinsic human rewards that accrue. This could partially explain why many teachers have negative attitudes toward continuing education programs even when they are paid to attend them. Some find that participation in such programs is not rewarding because they receive no recognition for participating, and because they do not enjoy the rewards of their own intellectual growth as much as they are rewarded by seeing such growth in others.

Teachers have certain attitudes and emotions regarding continuing education programs. Some feel that continuing education programs are boring wastes of time. Others may feel their intelligence has been insulted. Some teachers may resent the attitudes of supervisors who expose professional deficiency like laying open a raw nerve.

If continuing education is ever to improve the learning opportunities for children, it has to be rewarding for the teacher. Research by Maslow,⁵¹ Murray,⁵² and Frenkel-Brunswick⁵³ has suggested that if the prospect of some reward or satisfaction contributes to teachers' motivation to teach, then teachers' motivation to learn would be similarly dependent upon the prospect of a comparable reward or satisfaction. Aspy⁵⁴ suggests that the needs of students may be quite different from the needs of teachers in that students frequently act on the safety level or for "survival," while teachers act on a "need to get data" on which to judge the students' ability. When teachers are required to become continuing education students, they are faced with a role-shift from the security of evaluator to the more insecure status of "competitor for survival."

⁵¹Ibid.

⁵²Henry A. Murray, et. al., Explorations in Personality (New York: Oxford University Press, 1938).

⁵³Else Frenkel-Brunswick, "Motivation and Behavior," Genetic Psychology Monographs (Vol. 26, 1942), pp. 121-264.

⁵⁴David N. Aspy, "Maslow and Teachers in Training," Journal of Teacher Education (Vol. 20, No. 3., Fall, 1969), pp. 303-309.

The rewards of teaching mentioned earlier are important and valuable. Teachers and other school people should take pride in and receive enjoyment from their students and their accomplishments. However, if teachers are to be effective as facilitators of learning rather than as transmitters of knowledge and the cultural heritage, there needs to be a reduction in the difference between the perceived rewards of teaching versus learning.

Teaching and learning are both part of the same process and each has been defined in various terms. A Committee of the American Educational Research Association defined teaching as a "form of interpersonal influence aimed at changing the behavior potential of another person."⁵⁵ Marie Hughes defined teaching as "interaction used in its dictionary sense of mutual or reciprocal action or influence."⁵⁶ She goes on to say that teaching, because of its reciprocal and interactive nature, cannot be separated from the learner. If a problem exists at all, it is that teaching is something a teacher does with someone else. The notion that "someone else" is necessary was pointed out by Stolurow and Pahel who said, "...teaching is fundamentally a social process involving communication and interaction between at least two people, a teacher and a student."⁵⁷

Teaching and learning are inseparable. It is proposed that both terms are synonymous and may be defined as becoming engaged in any activity or experience that results in a change in behavior. In this context one could "learn" by one's self or "teach" one's self. A teacher can "teach" himself the same as a learner can "teach" himself.

It is suggested that teaching cannot occur without learning, and that there can be no learning without teaching. This is analogous to the scientific definition of work which states that a force must be exerted through some distance. A man may strain every muscle to move a large boulder, but if the boulder does not move, no work has been accomplished. A teacher may summon all his pedagogical skill so that a student may understand a certain concept, but if no learn-

⁵⁵Nathan L. Gage, Handbook of Research, p. 91.

⁵⁶Hughes, "Utah Study," p. 27.

⁵⁷Lawrence H. Stolurow and K. Pahel, "Letter to the Editor," Harvard Educational Review, (Summer, 1963), p. 384; cited in: Edmund Amidon and Elizabeth Hunter, Improving Teaching: The Analysis of Classroom Verbal Interaction (New York: Rinehart and Winston, 1967), p. 2.

ing occurred, neither did any teaching.

The behaviors exhibited by a teacher while teaching could be the same as those exhibited by a learner while learning. The notion that "teaching should facilitate learning" implies that some people can help others to learn more easily. Teachers make it possible for others to learn or change behavior by helping them to become involved in those activities which are most likely to result in changed behavior. For example, lecturing is a teaching activity only to the extent that it is a learning activity. Most teachers are aware that the process of preparing a lecture and then giving it helps the teacher understand his subject better. By lecturing, teachers help others learn by demonstrating to them how to prepare, organize, and present a lecture. If lecturing is a teaching method, then it is a learning method. Teachers might be more effective by helping their students prepare lectures than by giving lectures themselves.

Lecturing, grading, promoting, and assigning homework are rewarding to some teachers; and when these people are the ones who are lectured at, graded, promoted, or given assignments, they feel as if someone is "turning the desks around." That could be condescending, and cause some teachers to feel defensive. It could increase feelings of insecurity and be considered as a threat to teachers' egos, competencies, or knowledge.

Continuing education needs to be perceived not as a situation in which teachers become students where the "desks are turned around," but as a situation which engages teachers in those activities which contribute to a continuous change of behavior in a positive direction. If this can be done, continuing education may be less threatening, less boring, and more constructive than it is now to many teachers. If teachers are given opportunities to see and recognize growth in themselves, and to be rewarded by that growth, then more positive attitudes and more constructive outcomes of continuing education programs could occur. If teachers can be rewarded by the activities of teaching, they could feel equivalently rewarded by learning.

Some Implications for Continuing Education in Ohio

The purpose of this section is to identify certain assumptions, findings, recommendations, and other highlights of continuing teacher education with significance for the growth of such programs in Ohio. Some blank space appears following this subsection. It is provided so that additional implications may be filled in by those who wish to include them. Current thinking expressed in the

literature and the results of the Teacher Education Assessment Survey suggest that:

1. Continuing education programs should be designed to bring about improvement in the classroom by changing the behavior of instructional personnel.
2. Some continuing education programs can help instructional personnel learn new knowledge and skills. These may be called new skills programs. Examples include first-time programs in ETV, CAI, or new curricula; recent developments in subject area such as attending a convention exhibit to review new materials and products.
3. Some continuing education programs can help instructional personnel to improve, review, or refine earlier knowledge and skills. These may be called refinement programs. Examples include "brush-up" or "refresher" programs, human relations and communications workshops, resource planning and revising.
4. Some continuing education programs can help instructional personnel develop innovative and alternative ways to apply existing skills in the classrooms. These may be called innovation programs. Examples include how to use ETV in improving instruction, reorganization conferences, curriculum materials laboratory.
5. Successful programs in continuing education require the involvement, acceptance and support of most, if not all participants.
6. Programs in continuing education need to be designed with careful consideration of what teachers regard as their learning needs instead of teacher educators independently deciding what teachers need.
7. Instructional personnel should not be required to "take" continuing education in the sense that once they have "taken it" they have "had it" and never need to "take it" again. This is a vaccination theory of teacher education.

8. As school curricula continue to change, so will the requisite tasks, functions, duties and responsibilities, and competencies of instructional personnel.
9. Continuing education programs are the vehicles through which educational improvement can most effectively occur.
10. Successful programs in continuing education require the involvement of instructional personnel as the agents rather than as the objects of change.
11. Successful programs in continuing education have realistic expectations for growth of instructional personnel.
12. Successful programs in continuing education require early involvement for maximum commitment to program goals and objectives.
13. Successful programs in continuing education have activities and purposes that are appropriate for accomplishing the goals of the program.
14. Successful programs in continuing education are coordinated and conducted by skilled directors, consultants, and other professional personnel.
15. Successful programs in continuing education require adequate resources including human, financial, physical, and material facilities.
16. Successful programs in continuing education require mechanisms for feedback, evaluation, revision.
17. Cooperative efforts between state, local, and national and regional education agencies are feasible and are beneficial to the improvement of continuing teacher education.
18. Continuing education programs should be developed which emphasize the concepts of teamwork, cooperation, and collaboration.

Please use the space below to add any implications for continuing education that you think are important.

Differentiated Staffing

The State of Ohio Department of Education has encouraged experimentation with differentiated teaching staffs. The Education Professions Development Act of 1967 (EPDA) has also stimulated experimental programs in this area. In November, 1968, the U.S. Office of Education announced the approval of 625 projects which were to become operational during the summer of 1969 and the 1969-1970 academic year. Included were 125 Fellowship Programs and 500 training institutes, funded under EPDA Parts C and D, respectively. These projects were financed at a total cost of nearly \$60 million. Fellowship Programs provided graduate study of at least one year for both preservice teachers and teachers already employed. Fellows did not pay tuition. Experienced teachers were awarded a \$4,000 annual stipend plus \$600 per dependent. Preservice teachers could receive \$2,000 the first year and \$2,200 the second, plus \$400 per dependent.

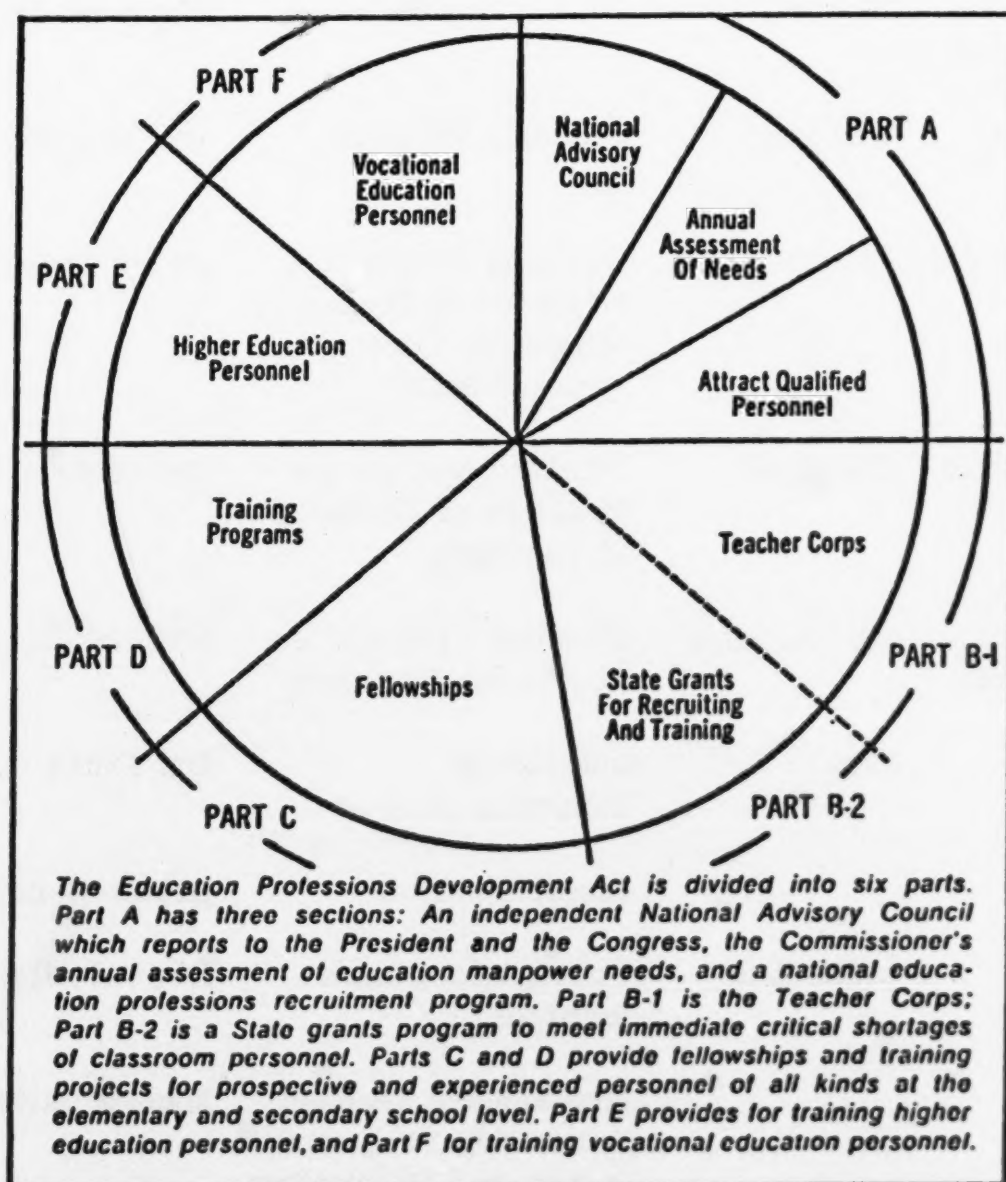
Training projects were intended to upgrade the supply of qualified educational personnel in areas of critical need. Participants paid no tuition and receive stipends of up to \$75 per week plus \$15 per dependent. Figure 10 shows the schematic structure of EPDA. Table 21 lists twenty-one EPDA—Part C and D projects currently operating in Ohio.

An EPDA Institute at the University of Dayton

As an illustration, the University of Dayton's EPDA Institute in Spanish was conducted for seven weeks during the summer of 1969. The objectives for participants included:

1. To learn how Spanish can be taught by a native speaker
2. To increase teaching effectiveness
3. To observe constructive contrasts between the North American and Spanish cultures
4. To have an opportunity to implement a system of Spanish instruction under the direct observation and supervision of an expert
5. To learn how to use certain instructional media,

Figure 10 — Schematic Representation of the Education Professions Development Act, 1967^a



^aReprinted from American Education, February, 1969

TABLE 21 — Ohio EPDA Projects as Approved by the
U.S. Office of Education, November, 1966^a

Institution	Location	Title of Project	Director
Bowling Green State University	Bowling Green	History Institute	Raymond Endress
Central State University	Wilberforce	Planning Program	Dr. Warren Nelson
Cincinnati Public Schools	Cincinnati	Training Program in Group Work Techniques for Visiting Teacher Staff ^b	Harry Lodge
Cleveland State University	Cleveland	Pilot Project for the Trainers of Teachers of Teachers	Dr. Richard McArdle
Independence Public Schools	Independence	Planning Program for Vocational Education	William Gessinsky
Kent State University	Kent	Institute in Industrial Arts	Dr. Frank A. Marchik
		English Institute	Regina Harvey
Ohio State University	Columbus	Foreign Languages Institute	Edward Allen
		Experienced Teacher Fellowship Program in Arts and Humanities	Manuel Barkan
Ohio University	Athens	Planning Program for Counseling and Guidance	Dr. Luther Hunsley
		Experienced Teacher Fellowship Program in Economics	Roman F. Warnke

TABLE 21 — Continued

Institution	Location	Title of Project	Director
Ohio University	Athens	Institute in Counseling and Guidance	Dr. James Grubb
		Institute to Prepare Teacher Aides	Albert H. Shuster
State of Ohio Department of Education	Columbus	Institute in Vocational Education	Harry Davis
		Foreign Language Institute	Leona Glenn
University of Dayton	Dayton	Foreign Language Institute	Dr. Mario Saquel-Montalva
		History Institute	Bruce M. Taylor
University of Toledo	Toledo	Reading Institute	Dr. Sandberg
Wittenberg University	Springfield	English Institute	Dr. John Ostrom
Wright State University	Dayton	Planning Program for Disadvantaged Youth	Dr. Madeline H. Apt
Yellow Springs School District	Yellow Springs	Planning Program for Disadvantaged Youth	no name available

^aSource: "Notification to Members of Congress" (Project Approvals, Washington, D. C.: Department of Health, Education and Welfare, Office of Education, mimeographed, November 21, 1968).

^bOriginally listed in the source as an Institute in Counseling and Guidance.

materials, and methods appropriate for Spanish instruction

According to Dr. Mario Saquel-Montalva, Director of the Institute, the program included a wide variety of learning experiences for employed secondary school teachers who are native speakers of Spanish. The experiences included demonstration classes, methods workshops, language laboratory techniques, composition in English and Spanish, linguistics, conversation, and cultural contrast study. Admission to the Institute depended on the following criteria:

1. Native speaker of Spanish
2. At least two years' experience teaching high school Spanish
3. Having a contract to teach Spanish for the coming year
4. Having at least 80 percent of teaching schedule devoted to Spanish
5. Having previously attended no institute of modern foreign languages under NDEA

Second and third priorities were given to those whose Spanish teaching load was 60 percent of their total schedule and to those with less experience. The forty participants spent about thirty-five hours per week in classes and laboratories and received an Institute certificate equivalent to two college credits from the University of Dayton.

Participants were eligible for the \$75 per week stipend, plus \$15 per dependent; however, they were responsible for their own travel, board, room, books, and supplies. There were no charges for tuition or fees.

Saquel said that most of the participants wrote informal letters to him after the Institute to tell how much they had learned. Supervisors and principals wrote that student learning had been improved considerably. Saquel suggested that (1) additional EPDA funds be made available to conduct a more comprehensive follow-up and evaluation, (2) the program should be expanded to serve a larger number of Institute participants, (3) at least 75 percent of all Institute instructors ought to have at least three years of high school teaching experience, and (4) the prohibition of applicants who have previously participated in NDEA or EPDA programs be repealed. The latter prevents the continuing

education of those who want to follow through on skill and attitude development.⁵⁸

An EPDA Teacher Aide Program at Ohio University

As an illustration of a teacher aide program, Ohio University conducted a "Multiple Attack on Poverty Involving Training of Teenage Youth as Teacher Aides to Work with Preschool and Elementary Children in Appalachia." Directed by Dr. Albert H. Shuster, the objectives of the program were

1. To aid in reducing the shortage of trained teacher aides in preschool and elementary school classrooms
2. To develop salable skills in individuals who might otherwise be unemployable
3. To encourage and help local high schools to include such programs in their curriculums
4. To utilize new human resources in meeting the needs of disadvantaged Appalachian children⁵⁹

The program was designed to train 150 beginning high school seniors, who came from homes classified as culturally and economically deprived, to become instructional teacher aides. The program had three phases:

Phase I

A summer program at the Athens campus including:
...study and practical experience in child development; children's literature and storytelling; musical

⁵⁸For a more comprehensive review of the project, see: Mario Saquel-Montalva, Final Report on the EPDA Institute for Advanced Study for Secondary School Native Spanish Teachers of Spanish, (Dayton, Ohio: The University of Dayton, 1969).

⁵⁹U.S. Office of Education, Creative Developments in the Training of Educational Personnel (Washington, D.C.: Bureau of Educational Personal Development, OE-58031, n.d.), pp. 16-17.

experiences for children; experience with art media and audiovisual equipment, experiences with natural science environment and awareness of the importance of science at all ages⁶⁰

Phase II

A five-week summer field experience in Head Start programs under the direct supervision of professors and kindergarten teachers

Phase III

A school year program involving service as a teacher aide for one hour daily and supervised by a classroom teacher, a supervisor, and a college coordinator

Each participant, upon graduation from high school received a certificate of completion of the program.

A follow-up conversation with Dr. Shuster revealed that students were selected on the basis of interest and socio-economic status. Because the participants were financially poor, the \$75 per week summer income was considered a boon, as was the \$1.60 per hour wage after they began working in the Head Start programs. A related problem was helping the teenagers learn to manage their money: "After the first paycheck, most of the kids bought loads of candy to share with friends in the dorms. Later on they were asking the instructors to help them get money to buy clothes for school." Shuster suggested that EPDA funds be extended rather than curtailed. "The first year we could train 150 participants," Shuster said, "but the next year we had funds for only 100. This coming year we only have enough money to train 75." Shuster said that funds were unavailable for adequate follow through to evaluate the effectiveness of the program.

The drop-out rate was low—about 3 percent—and nearly all the people were placed. Some went on to college to pursue teaching careers, but most are now working as full-time aides.

"I think the project is through. We need funding. We don't fit the Career Opportunities Program any more because many of the youngsters feel as we do that this was a terminal education program. When they return to their own

⁶⁰Ibid., p. 17.

communities they really become aware of the contribution they are making. It isn't feasible to get funds from the schools for continuing the program. They are too poor. We are still making an effort to get more funds," he concluded.

A recent survey of teacher aide programs in Ohio was conducted by Gerhard, Schwaderer, and Ward for the Educational Research Council of the Ohio Education Association.⁶¹ Eighteen operational programs in fourteen Ohio districts were visited. Auxiliary personnel were observed at all grade levels from elementary to high school and in a variety of situations such as Head Start programs, migrant worker programs, and slow learner classes.

The survey sought to learn why school districts undertook teacher aide programs. The major reasons found were to (1) relieve teachers of routine and clerical tasks, (2) augment regular classroom instruction, (3) permit new programs to become operational, such as nongraded classes, and (4) provide a link between the school and community. Other findings revealed that children received extra help and instruction, kindergarteners were better prepared for first grade, and they seemed more motivated and interested in school. The presence of aides tended to raise teacher morale, allowed more time for planning and individualizing instruction, and provided for efficient completion of clerical work.

It was emphasized that "the program will run smoothly, but there must be a training session for teachers as well as aides before the program actually goes into operation."⁶² A significant outcome of the survey was a list of eight potential problem areas when launching a teacher aide program:

1. aide selection
2. the orientation period and in-service follow up
3. policies for supervisory responsibility
4. job descriptions
5. teacher assignment
6. aide salaries
7. policies regarding the distribution and use

⁶¹Carol Gerhard, Mary Schwaderer, and Ralph Ward, Educational Aides (Columbus, Ohio: OEA Project Frontier, Ohio Education Association, Educational Research Council, 1969).

⁶²Ibid., p. 7.

of physical facilities, instructional materials,
and supplies

8. evaluation

These programs, local teacher aide training activities involving teachers, training institutes for the development of auxiliary educational personnel, and the implementation of experimental staffing arrangements, all point to an effort to improve the learning opportunities for students through the careful use of specialized staff skills. As pointed out earlier, the advantages and disadvantages of differentiated staffing depends upon which group is looking at it. Some teachers and administrators see it as an organizational and financial headache with problems of scheduling, compensation, and the bugagoo of status differences. Other professionals see differentiated staffing as an opportunity to give recognition to teachers with greater instructional responsibility, to stimulate increased professionalism, to allow more appropriate use of teachers' skills, and to find new passageways to improved student learning.

The kinds of advantages and disadvantages that accrue to any given differentiated staffing plan may rest in its design. For example, the Princeton City plan in Evandale, Ohio, emphasizes teachers' salaries. The Dayton City plan in Dayton, Ohio, emphasizes team teaching and planning.

Emphasis is put on planning, with teams working as much as six weeks ahead of time in determining individual responsibilities and locating needed materials...⁶³

English⁶⁴ has suggested that most of the differentiated staffing plans now in the literature may be categorized into one of three types: Refinement plans are polished versions of existing concepts and notions regarding staffing relationships; Reform models are those that seek to alter, or in some way represent, a revision in staff relationships; and Revolutionary plans are attempts

⁶³"Westwood Staffing Project Stirs Enthusiasm of Students, Teachers," Schoolday: Dayton Public Schools (Dayton, Ohio Office of the Superintendent, Vol. 2, No. 21, January 26, 1970), p. 1.

⁶⁴Fenwick English, "Differentiated Staffing: Refinement, Reform, or Revolution," ISR Journal, Vol. 1, No. 4, Fall, 1969, pp. 223-224.

to depart radically from traditional relationships.

Corrigan⁶⁵ found that major characteristics of differentiated staffing plans could be described best according to their emphasis as organizational teaching, learning, or curricular. He analyzed twelve models and categorized them according to English's taxonomy. The San Diego⁶⁶ and Fountain Valley⁶⁷ Models were placed in the Refinement category.

The Kansas City,⁶⁸ Niskayuna,⁶⁹ Temple City,⁷⁰ and Utah State⁷¹ plans were considered Reform models, as were the plans developed by McKenna,⁷²

⁶⁵Dean Corrigan, "Differentiated Staffing: Trends and Issues," Today and Tomorrow in Education (Rochester, New York: Genessee Valley School Development Association) Vol. 3, No. 5 (May-June, 1970), pp. 5-9.

⁶⁶Administrative Staff, Statement to the State Committee on Public Education (SCOPE), Report to the California State Board of Education, Sacramento (San Diego: San Diego Unified School District, June, 1967), C-4-7.

⁶⁷Edward W. Beaubier, "Experience with Differentiated Staffing," Today's Education, Vol. 58, No. 3 (March, 1969), pp. 56-57.

⁶⁸Donald Hair and Eugene Wolkey, "A Plan for Differentiated Staffing Public Schools, Kansas City, Missouri: A Case Study," (Kansas City, Missouri: Kansas City Schools, 1968, mimeographed).

⁶⁹"Model of Proposed Differentiated Staffing Pattern," (Schenectady, New York: Niskayuna Public Schools, n.d., mimeographed).

⁷⁰Temple City Unified School District, "New Careers in Teaching Differentiated Staffing" (Temple City, California: Board of Education, 1969). Cf.: M. John Rand and Fenwick English, "Towards a Differentiated Teaching Staff," Phi Delta Kappan, Vol. XLIX, No. 5 (January, 1968), pp. 264-268.

⁷¹State of Utah Department of Education, "Proposed Utah State Plan for Differentiated Staffing: A Proposed Framework for Developing a New Instructional System," (Salt Lake City, Utah: the Department, n.d., mimeographed).

⁷²Bernard H. McKenna, "School Staffing Patterns and Pupil Interpersonal Behavior: Implication for Teacher Education," (Burlingame, California: California Teachers Association, 1967).

Saxe,⁷³ and Sharpes.⁷⁴ Allen's "Learning Pavilion" Plan,⁷⁵ English's "Learning Stage" model,⁷⁶ and Fantini and Weinstein's "three tiered school" model⁷⁷ were seen as examples of Revolutionary designs.

Fantini and Weinstein's model, as a illustration of a revolutionary design, is based on three sets of objectives for an urban school. The first set includes academic skills and subject matter content. This set has already been "legitimized" by the schools. The second set includes the development of human social interaction, such as problem-solving skills applied to social action. The third set is concerned with the urban dwellers' style of living and identity. The model attempts to facilitate the attainment of these objectives by differentiating three levels of responsibility or tiers: (I) skills and knowledge (II) personal talent and interest, and (III) social action and exploration of self and others.

Tier I serves as an individualized information and retrieval base for building concepts in children's cognitive development. Tier II allows and encourages development of individual creativity and exploration. Tier III is a group inquiry into social issues and problems and exploration of self and others. It emphasizes the affective aspects of learning.

In this model, teachers would be assigned to tiers according to their strengths and interests. Community residents would also be brought in. The authors suggested that a design by McKenna be used as a guide for staffing. This design involves five types of teachers.

⁷³Richard W. Saxe, "New Ways to Differentiated Assignments Within a School: The 'Team Specialists' Idea," Remaking the World of the Career Teacher, National Commission on Teacher Education and Professional Standards (Washington, D. C.: National Education Association, 1966), pp. 177-183.

⁷⁴Donald K. Sharpes, "Differentiated Teaching Personnel: A Model for the Secondary School," (Unpublished doctoral dissertation, Arizona State University, June, 1969), cited in Corrigan, "Differentiated Staffing," 1970.

⁷⁵Dwight W. Allen, "The Learning Pavilion Model of Staff Differentiation," (Amherst, Massachusetts: University of Massachusetts, working paper).

⁷⁶Fenwick W. English, "A Radical Model of Staff Differentiation," Temple City, California: Temple City Unified School District, May, 1969, mimeographed).

⁷⁷Mario D. Fantini and Gerald Weinstein, Making Urban Schools Work (New York: Holt, Rinehart, and Winston, 1968).

The first type is the Teacher Technologist. This person has skill in implementing academic content and cognitive areas. The second type is the Liberal Enlightener, a "master presenter" who is a subject matter generalist. The third type, an Identifier of Talents, has skill in promoting exploration in broad fields. The fourth type is the Developer of Talents and Attitudes. This person knows how to help children develop a potential talent in a given area; e.g., playing an instrument. Fifth is the Facilitator of Attitude and Interpersonal Behavior Development. This person knows how to help others develop constructive human relations attitudes and skills.

According to Fantini and Weinstein, the three-tiered arrangement

...would be geared to meeting the common needs of all children without sacrificing individuality or cultural diversity...by dividing the school schedules into such segments as these three, rather than according to subject-matter learning per se, the educational process would be significantly more efficient in accomplishing its long-expressed aims.⁷⁸

The Beaverton Plan

The Beaverton, Oregon, plan⁷⁹ is a five-year project which began in the 1969-1970 school year. The goal was to create an environment to facilitate learning for learners rather than teaching for teachers. The project attempted to (1) meet current and future learning requirements of students and (2) to provide total involvement of teachers in planning, developing, and implementing the project.

⁷⁸Mario D. Fantini and Gerald Weinstein, "Social Realities and the Urban School" (Paper delivered at the Association for Supervision and Curriculum Development, Atlantic City, New Jersey, March 10-13, (1968), p. 32.

⁷⁹Harold Wik, "Differentiated Staffing Project" (Beaverton, Oregon: Beaverton School District 48, n.d., mimeographed). Cf.: Boyd Applegarth, "Differentiated Staffing in Beaverton," (Beaverton, Oregon: Beaverton School District 48, 1969, mimeographed).

The first year was devoted to an assessment of student learning needs. An analysis of the needs showed that new behavioral objectives had to be established and that to accomplish these objectives a new staffing pattern was necessary. Beaverton's plans had three steps: (1) identifying the skills necessary for operationalizing the new objectives, (2) developing and implementing a staffing pattern based upon these identified skills, and (3) designing continuing education programs to prepare personnel to perform these skills. Step 1 was completed at the Aloha High School during the 1969-1970 school year. Steps 2 and 3 began at the high school in the 1970-1971 school year while the Cooper Mountain Elementary School and Mountain View Junior High School began step 1.

The behavioral objectives at Aloha High were prepared in the cognitive, affective, and psycho-motor domains. They include basic tool skills, learning process skills, and personal-social skills. For instructional purposes, the objective-domains were reclassified as (1) man and his relation to his physical environment, (2) man and his relation to his social environment, and (3) man and his relation to work and leisure. Each domain comprises a teaching team responsible for developing interdisciplinary courses relevant to the objectives in that area. Each domain team will have a differentiated staff. Job descriptions have been developed by the teachers and were used as the basis for recruiting and training personnel for the 1970-1971 school year. Salaries will depend upon levels of responsibility, skills and competencies required.

Based on the work completed so far, the differentiated staffing positions identified for the Aloha High School are:

1. Domain Chairman

Provides the leadership and supervision necessary for planning, developing, and implementing the interdisciplinary curriculum. Domain chairmen receive a salary equivalent to twice the minimum paid to regular certificated teachers. They work a 9-1/2 month school year.

2. Skills Program Specialist

Diagnoses student progress and achievement and prepares learning program materials for developing specific skills. He is also responsible for supervising teacher assistants in the use of these program materials.

3. Supervisor of Teaching Assistants
Designs and conducts training programs for teaching assistants
4. Team Leader
Responsible for organizing personnel from different disciplines to teach core courses.
5. Associate Teacher
Responsible for implementing the instructional program under the direction of one of the above. Not directly responsible for curriculum design.
6. Business and Industrial Consultant
Advises the school on business education needs, gives individual guidance, and teaches units on business and industry. This person is made available through a joint appointment of the district and a specific industry.
7. Technicians
Responsible for inventorying, ordering materials, and setting up demonstrations and experiments.
8. Teaching Assistants
Responsible for completing specific tasks related to instruction. These are noncertificated staff and are responsible to certificated staff. Examples of teaching assistants include interns, student teachers, teacher aides, and community resource persons.

An important part of Beaverton's program is the involvement they have mastered. Teachers were involved through pilot committees for developing continuing education programs, job descriptions, and orientation programs. The participation of several resource groups, including representatives from local, state, and national education associations was attained. Colleges and universities, such as Reed College and Portland State University, and other educational agencies such as the Oregon State Department of Education, the Northwest Regional Education Laboratory, and the Oregon ComField Project were also involved.

Finally, the staff gained the involvement and cooperation of the community.

A twenty-three member committee of teachers and administrators works with an advisory board representing a cross section of the community.

"The philosophy of differentiated staffing," writes Harold Wik, Project Director, "indicates to us that no staffing model will be permanent, that individualized learning and individualized instruction are vital, and that 'the classroom' will have as little geographic limitation as possible."⁸⁰

Even though most colleges are not preparing teachers to assume differentiated staffing assignments, the Model Elementary Teacher Education Program proposals submitted to the U.S. Office of Education included provision for it.⁸¹ There appears to be a trend towards the expansion of differentiated staffing plans. The development of these plans is being supported by state departments of education,⁸² professional associations,⁸³ colleges and universities, the USOE, and even the public.⁸⁴ School systems, through funds made available through ESEA, EPDA, and through state and local sources, are beginning to operationalize the concept, if only on a pilot basis.

⁸⁰Harold Wik, "D.S. Project: Abstract of the Second Year Progress" (Beaverton, Oregon: School District 61, November, 1969), p. 1.

⁸¹More will be said about some of these proposals in a later section of this chapter.

⁸²CL: Roy Edelfelt and Wendell C. Allen, eds., The Seattle Conference: The Role of the State Department of Education in Teacher Education (Everett, Washington: State Superintendent of Public Instruction, 1967); Wanda Combs, The Ohio State Plan for Research in Teacher Education, Columbus, Ohio: State of Ohio Department of Education, mimeographed, August, 1969, and Division of Curriculum and Instruction, Florida Flexible Staff Organization Feasibility Study: Interim Report (Tallahassee, Florida: State Department of Education, February, 1969).

⁸³CL: National Commission on Teacher Education and Professional Standards, "A Position Statement on the Concept of Differentiated Staffing," (Washington, D. C.: NCTEFS, National Education Association, May 11, 1969).

⁸⁴Research and Policy Committee of the Committee for Economic Development, Innovation in Education: New Directions for the American School (New York: Committee for Economic Development, July, 1969).

As the Beaverton example shows, differentiated staffing responsibilities are dependent upon critical analysis of teacher tasks. Such analysis may be the greatest challenge ever made to education because of its many implications. Responsibility requires some measure of accountability, and that means suitable—and acceptable—techniques for evaluating teacher effectiveness. Performance contracting, interaction analysis, planning, programming, budgeting systems, and microteaching are only a few of the profession's attempts to resolve issues in this responsibility-accountability-evaluation cycle.

A problem connected with the analysis of teaching tasks is that these tasks change. The role of the teacher is continuously affected by changing community values, which affect educational objectives, which in turn affect change in the role of the school and the people in it. Instructional staffs may need to revise their value systems in harmony with social change. In this way the school becomes responsive to the needs and desires of the American community and provides the kinds of learning opportunities and experiences children require to satisfy those needs.

Learning is an emotional experience, and because the two are inextricable, so is teaching. Closely affiliated with emotions are attitudes, and as is frequently the case with human emotions and attitudes, logical or rational thinking may have little effect on how people feel about children, about learning, or about differentiated staffing. When considered in this context, the successful implementation of differentiated staffing schema could be more dependent upon teachers' emotional involvement and attitudes than upon a constant bombardment of rational, empirical advantages. Consider this statement by Corrigan:

Only after a value commitment is made to the kind of learning objectives sought can the essential tasks of teaching be defined. This is why we may be on the verge of a new era in education. Rather than just tinkering with the content or organization, we are going to have to spell out value premises which are rooted in learning objectives.⁸⁵

Another issue facing differentiated staffing is that it is based, in part, on the assumption that new staffing patterns are necessary to alleviate a shortage of teachers. Evidence presented earlier indicated that such a shortage probably no longer exists; and further, there will probably be an overage of teachers in

⁸⁵Corrigan, "Differentiated Staffing," p. 7.

the foreseeable future.⁸⁶ There is evidence that there will be a shortage of qualified educational personnel, such as technologists, instructional communications persons, aides, and other resource people necessary for a comprehensive learning program. For example, a recent U.S. Office of Education publication noted that "the national teacher shortage should be alleviated in the mid-1970's...[but] it should be kept in mind that...actual manpower requirements may be higher as the supply of teachers becomes more adequate..."⁸⁷ because new programs in prekindergarten, special education and others will demand more personnel.

Since additional educational personnel will be needed to staff the learning teams described in most of the differentiated staffing models, teachers will have to be prepared to work with these persons and with each other. Preservice and continuing education programs need to be designed to prepare qualified teaching team members; that is, persons who can function as participants in instructional effort and as independent teachers.

Some Implications for Differentiated Staffing in Ohio

The purpose of this section is to identify certain assumptions, findings, recommendations, and other highlights of differentiated staffing reviewed so far. Some blank space is provided following this subsection so that additional implications may be filled in by those who wish to include them.

1. Differentiated staffing, as a conceptual approach to instruction, has many potential advantages, including:

⁸⁶ College of Education, The Ohio State University, "A Feasibility Study of Four-Year Elementary Teacher Training at Branch Campuses in Ohio" (Columbus, Ohio: The University, mimeographed, June, 1970); and Research Division of the National Education Association, Research Report, 1970-R24: Teacher Supply and Demand in Public Schools, 1969 (Washington, D. C.: National Education Association, 1971).

⁸⁷ U.S. Office of Education, The Education Professions: A Report on the People Who Serve Our Schools and Colleges—1966 (Washington, D. C.: U.S. Government Printing Office, No. FPO, 100-50011, OE-50011, June, 1966), p. 30.

- (a) a more meaningful and responsive educational program for children
- (b) the stimulation of new approaches to individualized instruction, team teaching, and other instructional strategies
- (c) increased effectiveness of teachers as a result of facilitating their use of their skills and capabilities in their work with children
- (d) enhancement of the status of teachers by recognizing the scope of their responsibility and competencies through differential salaries
- (e) encouragement of closer interaction among teachers and between teachers and students
- (f) a setting in which instructional personnel can complement each other
- (g) the availability of a variety of career patterns for people concerned about the education of children
- (h) a range of ways to utilize community and school talent and resources

2. Differentiated staffing, as a practical approach to school organization and administration, has been seen to create numerous problems, including:

- (a) a demoralized teaching staff
- (b) a continuing source of frustration for professional and paraprofessional educational personnel because of role-role conflicts, and other conflicts which disrupt direct and reciprocal communication

- (c) teachers' loss of confidence in those who organize, administer, and implement the differentiated staff design
 - (d) reluctance on the part of the staff to identify and affiliate with an organizational framework they believe was imposed on them
3. Some of the reasons for these problems have been identified as follows:
- (a) plan put into operation too quickly
 - (b) insufficient funds for adequate planning and development
 - (c) inadequate staff involvement and orientation
 - (d) perceived contradictions in philosophy such as when authors claim that teachers will receive more money for greater instructional responsibility, and later say that more money will be paid according to an evaluation of their competence (looked upon by teachers as a sneaky insertion of merit pay)
 - (e) inadequate and poorly executed plans for community and student orientation
4. Teachers' attitudes toward differentiated staffing are probably influenced more by the way it is put into operation than by the concept itself.
5. Teachers and other instructional personnel need to be prepared to serve on a differentiated staffing assignment. This preparation should begin at the preservice level.
6. Differentiated staffing would mean the assumption of different instructional roles; it does not have to mean "better" or

"more important" roles.

7. Successful alternatives in differentiated staffing schema depend upon careful consideration of several areas, including:

- (a) recruitment and selection procedures and criteria for personnel
- (b) orientation and in-service follow-up procedures
- (c) organizational structure clearly defining line and staff relationships
- (d) understanding of major functions, duties and responsibilities and other tasks related to staff roles and assignments
- (e) salaries
- (f) personnel policies
- (g) evaluation procedures

- 8. The Federal government, the State Department of Education, the teacher preparation institutions, the schools, the professional associations, and the research agencies need to strengthen and coordinate their cooperative efforts of identifying, planning, funding, and operating programs which stimulate the improvement of instruction through better utilization of staff.
- 9. Ways to revise and restructure public staffing positions and responsibilities need to be built into the staffing arrangements.
- 10. The maintenance of a departmentalized, single-teacher classroom is no longer appropriate for operationalizing the kind of educational program secondary school students increasingly require.

11. Teachers need to learn a special set of affective and cognitive skills if the potential advantages of team teaching and differentiated staffing are to be realized. These skills include:

- (a) human relations, especially in the areas of caring, loving, and helping
- (b) subject matter competence
- (c) learning modes and strategies
- (d) how to say "no"
- (e) evaluating - deciding - value-judging
- (f) Attitude development
- (g) communicating
- (h) how to say "I don't know"
- (i) how to use media

12. Please use the space below to add any implications for differentiated staffing that you think are important.

Selected Model Elementary Teacher Preparation Proposals

It was mentioned earlier that several teacher preparation institutions have proposed new developments in their preservice education programs. The impetus for these proposals began in the fall of 1967. The Bureau of Research of the U. S. Office of Education initiated a project which requested proposals for "educational specifications for a comprehensive undergraduate and in-service teacher education program for elementary teachers." The intent of this three-phase project was to encourage the development of some exemplary models in both preservice and in-service education. The second phase of the project was to study the feasibility of these models. A third phase will be devoted to their implementation. Through this project it is hoped that some of the best thinking in the field of teacher education could be coordinated among the laboratories, schools, and colleges scattered across the United States. The project is based on the assumption that adequately funded demonstration centers could help bring about the improvement and modernization of elementary teacher education.

The proposals were selected as illustrations of how teacher education models have been developed, their implications for the present project, and because of the assumptions upon which they were based. The information was derived from the proposals and from the final report summaries submitted to the U. S. Office of Education by each institution.

The Florida State model illustrates a program that emphasizes selection procedures and is based on predictions of the future. The University of Georgia proposal was based on the delineation of teaching tasks and built upon a concept of differentiated staffing. Preparation for a differentiated staff role was also the major thrust of the University of Massachusetts model; however, the planned interaction between subject matter mastery, presentation skills, and decision-making competency was unique. Michigan State's proposal drew heavily on an interdisciplinary approach through a liberal setting. Syracuse emphasized the affective domain and created a model that sought to develop teachers as people rather than as technicians or institutions. The Toledo model embodied a comprehensive involvement of institutions, agencies, and community. Its affinity for the multiskill school was also seen as unique.

The ConField model developed by the Northwest Regional Educational Laboratory, the individualized instruction emphasis of the University of Pittsburgh model, and Teachers College, Columbia University's creative inquiry model could have been equally suitable for presentation.

Florida State University.

This proposal represents an interdisciplinary effort to design a preservice program for elementary teachers to meet the expectations of society, education, and teaching for 1978. It is characterized by several unique features:

1. Utilization of performance criteria. A series of experiences designed to enable trainees to meet stated performance criteria will be developed to replace formal courses.
2. Individual progress rates. Trainees will be permitted to move from one experience to the next when they have demonstrated the ability to meet performance criteria satisfactorily.
3. Immediate application of theory to practice. Trainees will have an opportunity to try out immediately new theories, learning about teaching through extensive use of small- to large-scale teaching activities.
4. A repertoire of technical skills. Trainees will be taught the technical skills of teaching and will be helped to integrate these into a total teaching performance.
5. Preparation extended into initial teaching years. An in-service phase, implemented jointly by the preparing institution and selected school systems, is an integral part of the total model.
6. Computerized management control system. A computerized management control system will be used to monitor individual trainees' progress and to make information available to staff and trainees as required.
7. Faculty development and utilization. The need for faculty continuing consistent with the demands of new roles in the model is recognized and provided for.
8. Selection of trainees for preparation. A direct effort is made to develop a selective system definition of the performance criteria deemed necessary for teaching.

9. Acceptance of specialization. The desirability and necessity for specialization in elementary school teaching is accepted and planned for in the model.

The rationale for this model program is based upon:

1. Predictions of what society and education will be like in 1970
2. Inferences about the nature of teaching and the role of the elementary school teacher by 1970
3. Implications for the preparation of elementary school teachers

Predictions can be risky. Assuming no catastrophes to block national progress, certain specific predictions relative to the preparation of elementary school teachers can be made. The predictions for society by 1970 are:

1. An accelerated trend toward urbanization
2. Traditional values and values will be increasingly challenged and the values of protest will demand public response
3. The identity of the individual will merge increasingly with that of one or more groups
4. The factors which tend to alienate young people as a group will continue to operate
5. Political concern will increase in complexity as that involving judgment and greater integrity will be required of both citizens and leaders
6. A massive effort will be made by the Federal government to stimulate social life
7. The influence of governments of multiple social entities will keep a broad range of issues before the public
8. Science and technology will continue to be dominant

forces in our lives, creating problems and offering solutions to problems over a wide front

9. The international character of life will influence social, political and economic affairs in a striking way

The designers of the Florida State proposal made the following predictions for education in 1978:

1. Society will make increased demands upon schools and colleges to fashion programs to meet the needs of all its people
2. The fact that education will be increasingly society-oriented will aggravate the tension between educators and the general public
3. Education will meet society's demands through increasing attention to the individual
4. Each major level of organized education will see itself as capable of managing its own program planning, and teachers at each level will seek autonomy over a greater range of matters important to them than ever before
5. Curriculum developers in elementary and secondary schools will try to overcome extreme subject-subject compartmentalization and move toward a more interdisciplinary design
6. Schools, especially in the secondary, will have to relate more directly to the total environment
7. Programs will be placed on continuous re-evaluation

Recommendations made about elementary school teaching by NCTE Bulletin:

1. Only broadly educated persons of high ability will be able to make the difficult decisions required of elementary school teachers

2. The emerging role of the elementary school teacher will require depth of study in at least one academic area and competence in employing a wide range of teaching strategies
3. The elementary school teacher will have to be able to work as an effective team member with other professional and paraprofessional personnel
4. Initial training requirements will call for a progressive--in-service continuum of experiences
5. The elementary school teacher will need to view the elementary school as an institution in almost continuous transition and come to expect and cope with educational change accordingly

Task Analysis of Teaching

The decision to use a systemic approach in determining the specifications for the model training program required a more careful and detailed analysis of the component behaviors in teaching than those predictions and inferences provided. Therefore, a task analysis of teaching as known for 1975 was undertaken. Four essential teaching behaviors resulted:

1. The teacher will plan for instruction by formulating objectives in terms of observable and measurable behavior
2. The teacher will select and organize content to be learned in a manner consistent with both the logic of the content itself and the psychological demands of the learner
3. The teacher will employ appropriate strategies for attaining the desired behavioral objectives
4. The teacher will evaluate instructional outcomes in terms of behavioral change

These behaviors are independent and are directly concerned with teaching:

limited-educational facilities. Still, only the individuals who have to do with simplifying teaching strategies closely interacting with the learner. Pupils can be active in the assimilation of objectives, in content selection, and in planning means and strategies mostly all kinds of evaluative activities. But the teacher facilitates pupils' learning by dealing with objectives, content, and evaluation and progressively analytical skills within these interactive areas. The competent individual is strategic teacher involves interacting with pupils as they deal with content and material which will produce and maintain appropriate learning behavior.

5. The teacher will demonstrate the competence and willingness to accept professional responsibilities and to serve as a professional leader.

This behavior, too, is affected as in the model program. Steps of achieving it are specified below.

The Curriculum

A program, consisting of (I) an induction phase, (II) a preservice phase, and (III) an in-service phase, was designed to develop the behavior outlined above.

The induction phase represents what would normally be the first two years of college. It concentrates on general education.²² Because the standards set by ILETS must be broadly achieved, this phase of the program makes a major contribution to that requirement. This phase will also incorporate professional studies to include work in behavioral sciences, an early exposure to development programs designed to inform prospective teacher trainees²³ about the role, demands, and rewards of teaching, and to provide them with a basis for making a commitment to the preparation program and to the profession.

The preservice phase begins after admission to the program, usually the beginning of the junior year, and continues through the completion of the Bachelor's degree and the granting of professional certification. This actually

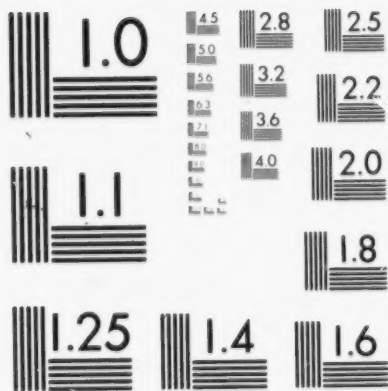
²²General Education: Studies in history, the humanities, the natural sciences, and the social sciences.

²³Training: Teacher candidates; college student involved in the preservice or in-service phases of the program.

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spent in this phase will vary among individuals. Emphasis will be on professional preparation; i.e., experiences designed specifically to prepare trainees to fulfill the professional duties of teachers. Candidates will also develop an area of academic concentration⁹⁰ and pursue electives. Success in the preservice phase is dependent upon the ability of the trainee to state objectives, select and organize content, utilize appropriate strategies, utilize evaluation techniques, and demonstrate a willingness to provide leadership and professional responsibilities consistent with stated performance criteria.

The in-service phase of the program begins with the Bachelor's degree and extends through two school years and three summers, culminating in the Master's degree and full professional certification. During the academic years, the trainees will be employed as teachers. Some time will be spent studying problems related to teaching. Three summers will be spent on campus. The goals of these summer sessions are: (1) to extend systematically the trainees' competence in areas such as psychological, sociological, and philosophical foundations of education; (2) to help them become more aware of and competent with the several dimensions of professional leadership responsibilities; and (3) to enable them to pursue an appropriate area of specialization from the point of view of role differentiation. A part of each summer, and especially the first one, will be devoted to preparation for the upcoming teaching assignment in the schools.

It is planned that the university will assume a major role along with the public school system for planning and executing the in-service phase of the program during the two academic years the trainees are teaching. The university will not attempt to dictate the program. It will enter into a cooperative arrangement with the local school system for planning a program appropriate to the needs of the system which at the same time will be consistent with the goals of the model program. The university will help with the necessary human and financial resources for this part of the in-service phase.

Facilitating Components

The admission and screening procedures are designed to select for the program those candidates who show evidence of capability to meet performance criteria as stated and who demonstrate a commitment to complete the program

⁹⁰Area of Concentration: Academic area, as art, mathematics, natural science, social science.

and to remain in teaching. Research evidence relative to predicting teacher effectiveness, success, and perseverance rate has been inconclusive thus far. Therefore, this model program seeks to establish a data bank on which to base studies to improve predictions in the future.

Upon admission to the program, candidates will be assessed against certain predetermined entry skills and knowledges in each of the areas included in the elementary school curriculum. Provisions will be made to enable trainees to overcome these deficiencies during the preservice phase. Retention will be based on ability to meet stated performance criteria. Regular feedback will be given to trainees on the quality of their performance so they may judge their own progress.

A major characteristic of this program is its staffing design. Many of the roles required in this program are new to professional teacher education. Therefore, the retraining of faculty becomes a major problem. In addition to the problem of staff development, the program directs itself to new staff requirements, staff organization, and staff utilization arrangements.

Many new roles will emerge within a college of education as traditional courses are abandoned and experiences oriented to performance criteria replace them. Three major types of assignments have been identified for faculty in the professional component: administration-student personnel, teaching-counseling, and selecting and producing materials. It is expected that most members will, during the course of an academic year, work in two types of assignments. Typically a faculty member will serve as a teacher-counselor and either as an administrator-student personnel worker or as a selector-producer of materials. The team concept will be utilized for much of the operation by grouping faculty members from various backgrounds with unique strengths to take responsibility for certain areas of the training program.

University of Georgia

This model was developed by analyzing what must be done by the teacher to cause elementary children to advance on the learning continuum, and to provide cognitive and affective experiences specifically intended to produce teaching behaviors. The first step was to define the role of the teacher. The content of a teacher education program should be based on the teaching act itself.

The analysis of the teacher's job began with a determination of elementary school goals. Next, objectives were developed in each content area and for cognitive processes, attitudes, and values. How the pupil behaves in order to achieve learning objectives was determined. These learning behaviors provided the basis for determining teaching behaviors.

All trainees will be helped to develop a common general background in content areas and in understanding elementary school age pupils. Three kinds of specialization will be provided. Each trainee will make a decision about these specializations.

First, trainees will select the age group with which they want to work. Two broadly defined age groups will be used: pupils ages three to eight or nine (or early childhood), and pupils from eight or nine to about thirteen (or later childhood). The choice will be reflected in the training experiences provided for the trainee.

The second choice for specialization will be the academic subject. All trainees will have a reasonable knowledge of each of the subject matter areas included in the elementary curriculum, but they will be expected to understand that this area will be an extension of study begun in the underclass phase.

The third area will be concerned with differentiated teaching functions. The equivalent of one summer during the in-service phase will be devoted to role differentiation. Care will be taken to ensure that each trainee has a clear understanding of such current and emerging roles in education as programmer, media specialist, and content area resource teacher.

This program will have enough flexibility to permit other specialist variations. For instance, a trainee could make a speciality of becoming a master teacher in an innercity school, or a master teacher with exceptionally able children.

Also relevant to the teacher task analysis were general principles of instruction, teaching, learning, and organization. These principles provided

certain teacher objectives and additional teacher behaviors which, in turn, provided an additional basis for the job analysis, including knowledge from educators in the field, plus knowledge of the nature of the child and how he learns. Humanistic learnings, attitudes, and values were also incorporated into the program. It is acknowledged that evaluative criteria for measuring attainment in these areas are inadequate. Despite this problem, the indicators are that the personality development of the teacher is as important as his intellectual development, and demands its inclusion in the model.

Job Description

The job description for the elementary teacher led to a categorization of teaching tasks into four levels: aide, teaching assistant, elementary teacher, and specialist.

The aide will perform noninstructional tasks and activities under direction of an experienced teacher. A person at this level will be primarily concerned with gaining experience in the school setting.

The teaching assistant will perform both instructional and noninstructional duties, thus assuming a more complex role. This person will generally be directed by the teacher, with responsibility for initiating and executing a variety of tasks. These tasks can be performed by an individual with about half the degree and certification requirements of a fully-trained teacher.

Completion of the preprofessional program will provide the trainee with (1) competency for paraprofessional service as a teaching assistant in the elementary school, (2) the associate's degree, and (3) the basic prerequisites for admission to the professional program. The preprofessional program will require approximately eighteen months for completion. After nine months the trainee will be competent to serve as a teacher's aide. About 90 percent of the experiences provided in the preprofessional program will be in general education. Ten percent of the experiences will be in paraprofessional and basic professional education. Approximately twelve weeks of on-the-job paraprofessional training will be required of the student, six weeks occurring about mid-way in the first half, and six weeks about mid-way in the last half.

The professional elementary teacher will have completed the requirements for a Bachelor's degree and for certification. The tasks will be instructional, with some noninstructional activities. The professional program also provides the trainee with prerequisites for admission to the specialist program.

The professional program will require approximately twenty-two months for completion. Approximately 25 percent will be on general education requirements, 30 percent on an academic content area, and 45 percent on professional education.

During the program qualified students will have three on-the-job experiences of approximately six weeks each in elementary schools, each with different age groups. Placement in these experiences will provide students with opportunities to work with children of various socio-economic and ethnic characteristics.

A ten-week internship will be required near the end of the professional program. This will be in an elementary school with children of an age range meeting requirements of certification for which the student is working. Special attention will be given to provide the student with opportunities to use the knowledge, understandings, and skills acquired in his academic content area.

The specialist will represent the highest level of instructional competence. He will engage in certain activities with children, with school personnel, and with people apart from these groups. There will be some noninstructional activities; however, the specialist will have no significant noninstructional responsibilities with children. Competence in working with children and in providing leadership and service to other school personnel will characterize the specialist. This person may occupy both teaching and specialist roles as a professional team member, or may perform the appropriate tasks from a central office location.

The specialist program provides the trainee with the specialist's degree in one of fifteen areas—either in one of the eight areas of competency characteristic of the professional program or in human development and learning, instructional media, pupil personnel, curriculum and program development, school-community relations, evaluation, and professional development.

Approximately 50 percent of emphasis will be devoted to the area of specialization, 40 percent to common experiences required for all specialists, and 10 percent with local conditions or exploratory experiences. Specialization for laboratory experiences requires all persons enrolled in the specialist program to be currently on-the-job practitioners or to have access to the special laboratory facilities needed. Arrangements for continuous field experiences will be made cooperatively between the program directors and the administrators in the field.

Performance Specifications

The performance specifications developed from the job analysis formed the core of the Georgia model. These statements described particular competencies teachers should possess for optimum effectiveness in a teaching-learning situation.

Specifications were prepared for the teaching assistant, the teacher, and the specialist. Generally, the teaching assistant should exhibit the specified behaviors after two years in the program; the teacher after four; and the specialist after six.

Some 2,000 specifications for teacher performance have been developed in twenty-four categories:

Drama	Instructional Improvement and
Composition	Professional Development
Cognitive Processes	Specialized Training Related to
Psychology	Local Conditions
Educational Tests and	History of Religion
Measurements	Art
Pedagogy	Music
Social Studies	Health
Speech	Physical Education
Reading	Philosophy
Literature	Guidance and Counseling
Listening	Social Foundations of Education
Mathematics	Media
	Science

The system for classifying these was based on taxonomies to designate the intended behaviors of students that would result from specific learning experiences.⁹¹ Categories in the cognitive domain include: (a) knowledge, (b) comprehension, (c) application, (d) analysis, (e) synthesis, and (f) evaluation. Those in the affective domain are (a) receiving, (b) responding, (c) valuing, (d) organization, and (e) characterization.

⁹¹These categories were based on Bloom and Krathwohl, Taxonomy of Objectives, 1956.

Organization of Training

Before the program content was organized and presented, principles used for criteria were established, including the requirements that:

- (a) the program should be planned in terms of behavioral goals and objectives
- (b) content should be organized in accordance with current learning theory
- (c) instruction should be controlled by an achievement, rather than a time variable
- (d) content should combine theoretical concepts with practical applications with stress being given to their interrelationships
- (e) more complex theoretical considerations should be undertaken only after basic practice and theory have been assimilated
- (f) content should give appropriate emphasis to all objectives

With these and other criteria, proficiency modules (PM) were developed. A Proficiency Module (PM) is a published guide to direct individual student learning behavior. It is a means of organizing various sizes, kinds, and clusters of content for instruction in such a manner that it is assured that the student either has acquired the content of the module, or that he will do so by carrying out the instructions contained in it.

The content for any PM is a selected cluster of related teacher performance behavior including definitions, facts, concepts, processes, motor skills, and attitudes. The core of the PM is a series of learning tasks prepared by specialists. These tasks are adaptable to individual differences and provide multiple sequences for achieving the desired objectives.

When properly constructed, PM's avoid duplicating content offerings and permit the trainee to progress at his own pace.

PM's are classified by type and by block. Type refers to PM's with

common functional relationships such as basic PM's required for all students in the preprofessional program or PM's required of all students enrolled for a particular area of competency. Block refers to clusters of PM's which must be taken in sequence. For example, there are six PM blocks in the preprofessional program and ten PM blocks in the professional program. The student must meet the level of proficiency required in all of the PM's of any block before moving on to the next.

The model specifies five kinds of laboratory facilities:

- (a) General Resources Laboratories with facilities for all students of universities, colleges, and schools such as central libraries and computer instruction centers
- (b) Instructional Unit Central Resources Laboratories which house and provide all learning materials and equipment essential for undertaking PM's within particular areas not readily available in General Resources Laboratories
- (c) Instructional Unit Field Laboratories which provide field facilities as needed
- (d) Clinics in which remedial services are provided when required
- (e) Instructional Unit Interaction Laboratories which arrange for such activities as special lectures, seminars, workshops, and recitals

An orientation program is required for trainees during the first week of the preprofessional program. During this period students become acquainted with the nature of the program, the individualized features of instruction by PM's and the location and operation of special facilities. The students also meet with their advisors and are introduced to their first block of PM's. Since the program is individualized, orientation beyond first enrollment is conducted through advisor-advisee conferences.

As part of the admission procedure, an interest inventory, personality schedule, and biographical information blank are administered. During training, the affective domain is appraised predominately in laboratory experiences. In

the preprofessional program, students are assigned standard tasks of a para-professional nature such as overseeing pupils engaged in games familiar to them, and cataloging and filing materials. Standard tasks for students completing the first half of the professional program include: interviewing pupils, administering standardized tests, prescribing, guiding, and evaluating. These standard tasks will be appraised by whatever techniques are appropriate.

A principle approach of the internship program will be microteaching. Supervisors and the normal feedback received will be used to evaluate performance.

After all Proficiency Module measures have been administered for a given program block, student progress is reviewed by an advisor. The student is either permitted to advance to the next block, is retained for further training, or is referred for special advisement. Other program evaluation criteria include elementary school achievement batteries, scales to measure parents' attitudes toward the goals of the system, and peer ratings.

University of Massachusetts

This model attempts to institutionalize change through an analysis of educational roles, tasks, structure, and objectives. It is based on seven assumptions:

1. The role of the elementary school teacher is changing and will continue to do so. Teachers must be prepared for change and not stability. The concepts of performance criteria, multiple instructional routes, differentiated staffing patterns, and participation in continuing education programs offer a meaningful approach to education in the future.
2. Specific performance criteria, based on an analysis of knowledge, skills, and attitudes in the human relations, behavioral, and content areas should be identified to provide a flexible basis for change. When the trainee meets the specified criteria requirements he will have completed the program, regardless of the length of time enrolled. Thus, variable entry and exit points in programs will occur.
3. Elementary school staffs will begin to differentiate their roles as teachers, thus requiring personnel

with different competencies in new and different areas of specialization.

4. Since there is no real evidence of the efficacy of any one major strategy of teacher training, this program offers many differing strategies.
5. Each trainee's strengths and weaknesses will differ. They will also change during the program. Therefore, one major goal is to provide continuous diagnosis of the needs of each trainee and constant evaluation of the program components designed to meet these needs. Cronbach's concept of Aptitude-Treatment Interaction is an important research component of the program.⁹²
6. As a consequence of the above goal, there will be at least two alternative and instructional paths to the same objective.
7. A teacher's training never ends. Therefore, a closely knit relationship between preservice and in-service training will be developed

Performance criteria were developed for thirteen areas of competency. In the first two, human relations and behavioral skills, teachers will better understand themselves, others, and their relationships to others. They will also master teaching skills to become an effective teacher.

Science, language arts, mathematics, aesthetics, social studies, and foreign languages represent the six content areas which form most elementary school curricula. A program in preschool education will also be part of this program.

The evaluation area includes performance criteria for the teacher in tests and measurements as well as skills required to make curriculum decisions. The media area contains criteria from simple to complex understanding of

⁹²Lee J. Cronbach, "How Can Instruction be Adapted to Individual Differences?" in Robert M. Gagne, ed., Learning and Individual Differences (Columbus, Ohio: Charles E. Merrill, 1967).

audiovisual media. The supervision area contains criteria for the effective training of supervisors in the elementary schools. Criteria in the area of technology also have been written as required supplements to any of the regular areas of concentration.

The performance criteria in each area are defined, whenever possible, in a hierarchical order from the simple to the complex. The trainee will decide whether to specialize in a particular area or to be a generalist elementary school teacher with certain levels of competency in each of the areas. If a trainee elects to specialize in science, for example, he will be required to meet certain criteria in the human relations and behavioral areas, a large number of criteria in the area of science, as well as defined minimal levels in all of the other areas. This requirement is based on the belief that every elementary school teacher should know something about each area of competency represented by a differentiated staff, if for no other reason than to improve communication and openmindedness.

The areas of competency are not closed since a person could spend a lifetime and not be able to meet all the possible criteria which could be written as more information and skills become known and developed. Other areas of competencies can be developed as the elementary school changes.

Performance Criteria as a Planning Principle for a New Model in Teacher Education

The formulation of performance criteria requires the specification of behavioral objectives. The attainment of these objectives does not necessarily depend on the completion of "courses." At least two alternative means will be available for meeting performance criteria.

Performance criteria have been developed in three broad conceptual areas related to teaching (1) content knowledge, (2) behavioral skills, and (3) human relations skills.

Content Knowledge

Content knowledge includes the depth and breadth of content most often seen as deriving from undergraduate liberal arts courses as well as the kind of content knowledge most often associated with that required within a school of education. The latter is seen as a logical extension of the former, inseparable, but focused on questions of relevance and conceptual organization for pupils at the elementary level.

The restatement of content requirements from course requirements for a specified period of time to performance criteria which emphasize ability to perform was the major thrust in the planning stages of this model.

Behavioral Skills

The goal of this program is to develop the technical skills of teaching. The premise is that much of teaching consists of specific behavioral acts. If these acts can be identified, different training procedures can be developed to produce proficiency in their use. One component of the proposed program will be the use of microteaching to train prospective teachers in these technical skills.

Human Relations Skills

Human relations are those behaviors exhibited in relation to self and other individuals and in relation to groups. Thus, a single individual thinking about himself or two individuals meeting in an interpersonal interaction are engaging in human relations behaviors. School classrooms or group dynamics sessions are situations in which human interactions occur.

The proposed program seeks to produce persons who meet the human criteria of warmth and understanding, are capable of rigorous thinking, are in control of their own behavior, and are in a constant pattern of growth. It has many specific value commitments as to the type of human behaviors considered desirable for elementary teachers, including warmth, critical thinking, openness, and consciousness of cultural differences. These value concepts, however, have been defined in behavioral terms and specified so that they may be taught as planned experiences rather than by admonition, example, or by chance. Some new constructs such as attending behavior, decision process, and the physical system are introduced by adding more precise definition of human relations behaviors. These behaviors have been introduced in a hierarchical structure so that the trainee learns how to integrate old behaviors into new patterns.

A set of guidelines based on the use of hierarchies of performance criteria for two distinct but interrelated purposes was developed: (1) diagnosing individual teacher education needs and prescribing from a number of learning alternatives designed to remediate those needs, and (2) evaluating competency and growth as a teacher to determine initial placement and career advancement within a differentiated staff.

As differentiated staffing becomes more feasible, carefully thought out performance criteria for teachers becomes a necessity. A school which allows for diverse teacher roles is uniquely motivated and able to analyze and reformulate the criteria by which it can judge competence in any given task. With such criteria, teacher training, both at the preservice and in-service levels, becomes closely integrated with the main concern of all educators—the educational development of children.

If teacher education is reorganized so that continuous relevant growth experiences are provided for teachers throughout their careers, then preservice education and in-service education will become a part of the same continuum. In specifying teaching performance criteria, priorities need to be set in such a way that certification becomes a formality and professional growth becomes the criterion of all training experiences.

As performance criteria were developed, the need for reorganizing teacher training was education needs and prescribing from a number of learning alternatives designed to remediate those needs, and (2) evaluating teaching competency and growth as a teacher to determine initial placement and career advancement within a differentiated staffing structure.

Operating within the perspective of a differentiated teaching staff fosters recognition of significant distinctions among teacher roles. It is at this point that performance-based task delineations can be developed which will provide the key to relevant continuing education programs. As differentiated staffing becomes more feasible, then carefully thought out performance criteria for teachers becomes a necessity. A school which allows for the possible diversity of teacher roles is uniquely motivated and able to analyze and reformulate the criteria by which it can judge competence in any given task. With such criteria, teacher training, both at the preservice and in-service levels, becomes closely integrated with the main concern of all educators—the educational development of students.

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System Conceptualization of the Model
Elementary Teacher Education Project

As performance criteria were developed by the project staff, it became increasingly apparent that a totally new approach to the organization of teacher training was apparent. Systems analysis was used to organize the available objectives. The subsystems composing this model are:

- A. A Control Subsystem to maintain the daily operation of the model. It insures stable operation by carrying on a continual analysis of collected data and uses this analysis for decision-making. It provides immediate feedback for system control. It is concerned with aptitude assessment, guidance, scheduling, and attitude monitoring.
- B. An Administrative Subsystem to supply materials, staff, and paraprofessionals necessary to operate the program. It includes management and allocation of funds and coordinating the program with the rest of the University; e.g., certification agency-school districts.
- C. An Information Subsystem for data collection and analysis. Sophisticated methods of data storage and retrieval must be used in program implementation.

This subsystem will include (a) aptitude and achievement data, (b) sequence of learning experiences selected by each trainee to meet each performance criterion and some measure of the effectiveness of this sequence in relation to the trainee's goals, (c) the cost in terms of resources and the student and faculty time required to help each student meet each performance criterion through each instructional route, (d) system status of each trainee; i.e., what performance criteria he has met and what educational alternatives he is now engaged in for meeting which performance criteria, and (e) utilization and availability of all training resources including staff, equipment and facilities.

- D. A Placement Subsystem to disseminate information about the program and the products of that program to prospective employers. In addition, it will determine qualifications and vocational interests of trainees, determine employment opportunities and recommend trainees to positions.
- E. An Educator Subsystem with two components: human and automated. Both will be responsible for a direct educational interaction with trainees and for generation of all instructional methods used by the trainee. These models range from lectures to microteaching clinics. The subsystem must respond to demand changes by trainees in institutional alternatives.
- F. An Analysis Subsystem for Evaluative feedback. This feedback is used to add, delete, and modify performance criteria. The analysis of trainee performance and indirectly the effectiveness of performance criteria is measured using rating procedures, videotapes, archival data, and market value of trainees. Comparative analyses are made of three groups: program graduates, graduates of other teacher education programs, and the population of experienced teachers.

Michigan State University

This proposal is built upon the principles and techniques of behavioral science and uses an interdisciplinary approach.

Five major curricular areas are included: General-Liberal Education, Scholarly Modes of Knowledge, Professional Use of Knowledge, Human Learning, and Clinical Experiences.

Explicit content and instructional recommendations for implementing these areas are presented as short, single-purpose experience modules. Each module is directed toward the accomplishment of a particular behavioral objective, is reported and filed in a uniform manner, and can be used for individualized instruction. These modules are grouped into clusters which, for the purposes of administration and communication to the academic community, are described as "components" with quarter-term credit weightings.

This modular approach implements the values of (1) specifying behavioral objectives, (2) precise description of instructional experiences, (3) multiple-path programming to provide for the specific needs of different trainees, and (4) providing for curricular change through continuous, testable small-scale alterations.

More than 2,700 modules were written for the program. These modules have been stored in a specially designed information retrieval system and can readily be retrieved in their most current form. Through transfer of data cards or computer tapes, a college or university can obtain its own copy of the program.

General-Liberal Education

This is a broad, basic core of liberal arts education designed to relate the trainee's knowledge to the study of human behavior. It is divided into the humanities, social science, and natural science. A "Modes of Inquiry" seminar completes the General-Liberal Education pattern. This seminar deals with the need of students to see the common aspects of all scholarly endeavors.

Scholarly Modes of Knowledge

The content in this curricular area is directly applicable to elementary school teaching, and the modes or styles of inquiry of scholars are stressed. There are seven component parts. A linguistics component to explore the nature of language, a communications component to study verbal and nonverbal communication patterns, a literature for children component which combines the literary and graphic arts, a fine arts component to study: art, music, dance and drama, a social science component devoted to social science theory and research, a science component and a mathematics component.

Experiences in Scholarly Modes of Knowledge are interrelated with those in the Professional Use of Knowledge and Clinical components. Thus, as trainees learn mathematical content they can practice the concept immediately in a mathematics laboratory, consider the implications for professional use, and employ their knowledge in a field setting.

Professional Use of Knowledge

In this area the trainee learns how to translate knowledge into action. Building upon General-Liberal Education and the study of Human Learning and

integrating with the work done in Scholarly Modes of Knowledge, this area focuses upon the study of instructional strategies used in the elementary school. Simulated and live contact with elementary-school-age children is planned. The component areas are reading, language arts, social studies, science, and mathematics. Experiences in learning these components include actual and simulated experiences in elementary classrooms, microteaching, self-study projects, and many different kinds of laboratory and field experiences. Also included are autotutorials, small and large group approaches, multi-dimensional approaches, materials selection, media utilization, and evaluation techniques.

Human Learning

Exploring human capacity for learning, understanding environmental systems, and inquiring into cognitive development are the behavioral categories brought into interaction in this curricular area. First contact with this area occurs early in the trainee's undergraduate program. A second contact occurs during the senior year, concurrent with an internship. At this time the trainee studies the environmental systems which influence human growth and learning. For example, students completing an urban internship will make an analytical study of their teaching community better to recognize the societal forces and experiences affecting the learner.

Clinical Experiences

Four phases of clinical experiences will be available: (1) tutorial, (2) career-decision seminar, (3) analytical study of teaching, and (4) team teaching and internship.

During internship trainees are assigned full-time to an elementary school classroom for an academic year. They assume autonomy and responsibility for classroom activities under the guidance of an intern consultant, and will receive assistance from university and school district resources. A unique cooperative school district-university fiscal arrangement provides for five interns to be assigned to five elementary teaching stations under the direction of an intern consultant. The combined salaries of these six people are equated with those of five beginning teachers, thus incorporating supervision into the program.

Teacher Specialization

Program differentiation and specialization for the trainee occurs along

two dimensions: the amount and the area of subject-matter specialization, and the age of pupils to be taught.

The middle school and team teaching concepts are two organizational developments requiring teachers with strong subject-matter competency. Further, new and experimental curricula demand increased expertise on the part of the teacher. As a result, the role of subject-matter specialists is emerging in the elementary school. Program branching provides for those students planning to teach preschool, primary school, and middle-school age children.

Continued Professional Study

This model is predicated upon joint responsibility by several educational agencies for the continuing education of teaching staff. A Clinic-School Network is established to promote continual feedback and program development. A college or university works with one or more school systems. Larger programs incorporating several clinic-school centers could function as a network.

Elementary schools furnish the basis for materials upon which the undergraduate program is built. They become the testing ground for teacher education theories. Trainees observe pupils there and analyze teacher-behavior patterns. Interns teach there. University staff people work there in developing appropriate materials for undergraduate instruction.

The university and elementary school cooperate to promote the continuing education of practicing teachers. Advanced study in the behavioral sciences for practicing teachers provides further understanding of the environments within which children develop, and the creation and utilization of the needed tools for working with them.

A small portion of highly skilled and successful post-Master's degree teachers may be selected for extensive training in professional leadership. Such personnel would work with undergraduates, serve as team leaders in instructional team teaching situations, be intern consultants, develop elementary school and university curriculum materials, be elementary school principals, and assist with elementary pupils having unusual or difficult learning problems.

The role and training of one such professional instructional leader, the media specialist, is described as a paradigm for the others. The need for instructional teams in elementary schools highlights the potential for such positions. Another staff position, the Associate Teacher, is also delineated.

Program Evaluation and Development

Constant evaluation and feedback is provided in a variety of ways. The clinic-school network will serve as a laboratory. Some experienced teachers from clinic-schools return to college to work with undergraduates. Some would contribute through program development, refining teacher behavior analyses, simulation, and microteaching, while other teachers would focus on research. Upper classmen work with students in the Career Decision Seminar. Through designated experiences with educators at other points in their development, trainees move from student-oriented to profession-oriented behavior.

This recycling is integral to the clinical approach emphasized in this model. It develops a clinical behavior style in graduates, it utilizes a clinical approach in its own instruction of students, and provides for continued renewal through analysis of the program itself.

Management

Five subsystems are included in the organizational plan: Program Development, Clinical Experiences, Evaluation, Information Retrieval, and Management Planning. The management component is designed to employ the same decision-making techniques advocated for teachers. The clinical behavior style permeates every phase of the program.

The Program Development subsystem is responsible for developing and delivering the nonclinical experiences of students. The Evaluation subsystem assesses the viability of the program and its various components. The Information Retrieval subsystem provides, among other things, data on student progress and personal characteristics, relevant factors in clinic-school settings, experience modules within the program, research data, and management data. The Information Retrieval model is a modification of the BIRS (Basic Indexing and Retrieval System) program developed at Michigan State University.

Syracuse University

This model is based on six principle assumptions:

1. No one point of view regarding teacher education has been demonstrated to be most effective. From a pluralistic open dialogue involving students, teachers, and researchers, hypotheses can be generated and tested that could improve teacher education.

2. There will be children to educate. Since no one is sure of what the future will be or how the children of such a future society should be educated, teachers must learn how to be continually self-renewing.
3. The Model Program will be relevant in the changing world in which it will "live" only if it has a built-in intent, action, feedback system for processing ideas and generating hypotheses regarding the system and how it will relate to the changing world.
4. The development of self-renewing teachers can only be accomplished by a self-renewing staff and program. This assumes continuing in-service education for the professional staff of the program.
5. Learning styles, learning rates, and what a person considers important to learn in part constitutes the uniqueness of an individual. It is assumed that providing a program that recognizes and accommodates these differences is one way of fostering the development of self-directed, self-renewing teachers.
6. The optimum functioning of this program will depend upon a system of protooperation involving preservice institutions, public schools, and the designers and developers of educational materials working together in new ways.

Structure of the Model Program

This model is designed as a five year program. The first two years and a substantial portion of the third are devoted to liberal studies. This includes conventional liberal arts courses and a Liberal Education Component. A component is defined as a unified set of curricular-instructional experiences that continue through the program over an extended period of time. The unifying elements are derived from the disciplines they encompass, such as the liberal arts and developmental psychology. The Liberal Education Component is the most diversified of all. It comprises three two-semester courses in the humanities, the social sciences, and the natural sciences. These courses are designed to provide a knowledge-integrating function and matrix for studying contemporary issues of concern to people who work in these areas. This block of liberal

studies is designed to provide the trainee with most of the knowledge and processes used to teach children.

The remainder of the third year is designed to provide the trainee with a preprofessional introduction to teaching. This is structured around six professional components: (1) Methods and Curriculum, (2) Child Development, (3) Teaching Theory and Practice, (4) Professional Sensitivity Training, (5) Social and Cultural Foundations, and (6) Self-Direction. Each component focuses on: (a) the process of using knowledge and skill in the area of elementary methods and curriculum for resolving teaching problems, (b) the process of applying observational skill and knowledge of child development theories in making curriculum and instructional decisions, (c) the process of using principles of teaching theory to develop a flexible repertoire of instructional behaviors to be used in teaching, (d) the process of becoming more aware of self, self as a teacher interacting with children, and self as a teacher who is a member of an organization, (e) the process of using knowledge and skill from the social and cultural foundations to understand the forces affecting pupils, teachers, and American education, as well as the process of analyzing the logic of educational language, and (f) the process of developing a disposition for self-direction as a student and a teacher.

Each component comprises a series of instructional modules: planned instructional episodes ranging from several hours to several months. Most modules are pre- and postperformance measures. Some are designed to measure performance continuously.

During the junior preprofessional year, the student learns and applies his learning at his own rate. The applications of learning occur in settings such as simulations, tutoring, and in microteaching. The student also learns a series of professional skills and knowledge that become the foundation for full-time professional study and practice during the senior professional year and the resident teaching year (fifth year). If the student decides not to be an elementary school teacher, he may continue his college program in some other field without loss of credit.

If a student decides to pursue full-time professional study during his senior professional year, tutorial relationships with elementary school pupils and exploratory microteaching are replaced by a series of teaching experiences that bring him closer to the point of planning, teaching, and evaluating a series of teaching units for which he is responsible. This is done in Teaching Centers located at the public schools and staffed by trained clinical teachers and clinical professors. Team supervision in the Teaching Centers is accomplished with generalists (clinical professors).

During the senior professional year, the student selects a teaching specialization. The specialization could be as general as nursery school education or the social sciences, or as specific as information retrieval and data processing on children's literature for intermediate grade Mexican-American children. Students explore several specializations before making tentative decisions. Assisting the student in the process of thinking through significant problems in elementary school education, finding a problem area that is of interest to the student and then working out a program of studies leading to a specialization in that area is one of the functions of a Self-Directed Component in conjunction with personnel from the other components. Each component provides for open exploration modules to assist the student in choosing an area of specialization.

By the completion of the senior year, the student should have developed the necessary skills, knowledge, and attitudes to gain provisional certification in most states. He could decide to continue for a fifth year to pursue a specialization program during the summers preceding and following the public school year, and emerge in half-time partnership teaching at a Resident Center for an entire school year. In this model, partnership teaching means that two resident students would share responsibility for one classroom, for which each would receive half the salary of a beginning teacher. Supervision of the residents would be performed by a team of trained clinical professors who would also conduct seminars. The content of these seminars would be drawn from residents' teaching problems and in many cases would be applicational extensions of the professional training obtained in the professional components of the junior and senior years. The partnership assignment of residents to one classroom would allow for flexible schedules of teaching, participation in special curriculum projects, and independent study in the student resident's area of specialization. The model provides for the granting of a Master's degree or its equivalent upon completion of course work the summer following the resident year of teaching.

In summary, this model provides for three years of professional study and practice based on a foundation of liberal studies. The three years of professional study and practice are designed as a series of largely self-paced experiences. Each experience contributes toward the development of a skilled and self-directed teacher who can meet the demands of teaching at the time of his graduation from the program, and who has developed the disposition and skills for continued adaptation to a changing world.

Supporting Systems

The program provides for three support systems: (1) a Program Support System, (2) an Information and Evaluation Support System, and (3) an Organizational

Support System.

The Program Support System has three primary functions: (1) the design, development, and testing of instructional modules, (2) the redesign, redevelopment, and retesting of instructional modules that when put into operation do not function up to specifications, and (3) providing the necessary maintenance functions to support the instructional program in operation.

The Information and Evaluation Support System provides the Program Support System with the information it needs to perform its redesign and redevelopment functions. It also gathers information about student progress and feeds this information back to the student and instructional staff in a form useful for facilitating the student's self-paced progress. A third function of this system is to evaluate the effectiveness of the program for students with different characteristics in terms of the program's ability to foster the development of competent self-directed teachers. This system also disseminates findings derived from a study of the experimental program in operation in other teacher training institutions.

The Organization Support System is responsible for developing continuing education programs and for developing an organization that can facilitate the attainment of the program goals by focusing on its internal operating structure and its relationship with the larger organizations associated with the model program and on which it would be dependent (the university, the school system, and the educational industries and/or regional laboratories that would design and develop the educational materials necessary for the program's operation). A key function of this system is to create, over time, a protooperative federation of institutions to: (a) profit from such a federation, (b) tap the unique potential that each sector of the educational enterprise has to contribute to teacher education, and (c) assume mutual responsibility for the education of teachers who in turn will educate the children of our country.

University of Toledo

The general goals in this model were considered from the perspective of five contexts which grew out of the concentrated efforts of a consortium of the State Universities of Ohio. The contexts were: Instructional Organization, Educational Technology, Contemporary Learning-Teaching Process, Societal Factors, and Research. An authority in each of these context fields prepared a position paper on his topic. Other knowledgeable persons in each context field were provided with these position papers and asked to react to them. These position papers and reactions provided the data for preparing 2,123 behavioral

objectives for six target populations concerned with teacher education:

1. Preservice—preschool and kindergarten teachers
2. Preservice—elementary teachers (grades 1-8)
3. In-service teachers
4. College and university personnel
5. Administrative personnel
6. Supportive personnel

Educational specifications were formulated to implement the entire range of behavioral objectives. These consisted of the behavioral objective(s) to be implemented, the treatment to be utilized in accomplishing the objective(s), materials needed, and the evaluation procedures to be applied to determine whether the objective(s) have been successfully achieved. Because of overlap 818 specifications were able to accommodate all the objectives. These specifications were organized first according to contexts, next, subject areas, and finally, topics.

Organization for Implementation

To deal with the 818 specifications, it was necessary to code them in some way to permit selection, rejection, ordering and reordering according to the population to be served. Each of the four major parts of every specification was coded. There are many advantages to this procedure, but the most obvious is rapid collection of all specifications pertaining to one target population. To demonstrate this capacity and to provide a guide for those wishing to implement aspects of the program, the specifications are grouped according to the six major target populations.

Table 22 indicates the number of specifications by context required by the composite programs for each target population. In practice, the user would be supplied with the numerals of each specification in the population and a detailed summary of all the information coded. This, in itself, tells one much about the requirements of a program for the particular target population. There is no one way of ordering the specifications. This could be a function of progressive difficulty of content, of ease of administration—that is all activities to be performed in the field or the classroom could be grouped together—of teaching method such as academic presentation followed by simulation and actual application, or of other criteria relevant to the particular conditions of users of the specifications. Various techniques for ordering the specifications are suggested in the report.

It is essential that the program provide easy access to groups whose needs and interests are found in parts of the total program but who cannot participate in all aspects of one of the programs prescribed for the six target populations. To create programs for such special purposes it is necessary to agree upon the general goal and the specific objectives. These become the selection criteria to draw out appropriate specifications. When the cards were sorted for one special program example, Research Training for Teachers Conducting Research in the Instructional Setting, ten topics were identified in three contexts using only forty-nine separate specifications. Such a program could be offered as an eight week summer institute.

Table 22 — Summary of Composite Specifications
for Six Target Populations by Context

Target	Context					Total
	Instructional Organization	Educational Technology	Learning- Teaching Process	Societal Factors	Research	
Preschool	157	60	102	74	67	460
Elementary	151	75	102	69	67	464
In-service	144	85	113	91	77	510
College and University	79	93	96	65	116	449
Administrative	62	70	103	126	77	438
Supportive	22	71	--	28	--	121

Characteristics of Programs Utilizing the Educational Specifications

It is difficult to generalize about the various uses of the specifications discussed under the selected target populations and the one prototype special purpose program. However, there are a few dominant characteristics of any program based on these objectives and specifications, including:

1. The major instructional focus will be on the context of Instructional Organization and Contemporary Learning-Teaching Process
2. Both Educational Technology and Societal Factors will receive more attention than in traditional programs
3. There will be an emphasis on conducting and using research in the instructional setting
4. The treatments indicate a program which is activity centered
5. Student involvement is equally divided between individual study and group or team experience
6. Typical treatments provide for a progressive involvement from observation through simulated activity to direct classroom experience
7. Conference, performance, and observation are important means of evaluation
8. A wide variety of media is required to implement these programs

An evaluation model to permit comparisons between the consortium program and other strategies of teacher education was developed. The model is referred to by the acronym CIPP (Context, Input, Process, and Product) and provides for systematic content evaluation and ad hoc process and product evaluations. A significant portion of the project resources for the implementation phase of the program will be included in the evaluation component.

This program has been arranged in behavioral terms so that it may be evaluated at any time and be self-correcting. Provisions for prompt and objective feedback were included. This will enable implementing institutions to enter into the new program with confidence that selected specifications can be supplemented or modified in the regular course of the program.

Summary of the USOE Models

Each of the models is unique in some way. The models also have important commonalities which, in many ways, make them more alike than different. For example, they are all based on the assumptions that universities are necessary to train teachers, that trained teachers are necessary in our system of American public education, and that the present system is the one that will continue. These and other fundamental assumptions are probably necessary to maintain agreed upon direction and goals. Many of these and like assumptions are necessary, too, because without them the USOE's METEP project could have lacked strength. For example, it would have been very surprising if an institution was particularly interested in planning "educational specifications for a comprehensive undergraduate and inservice teacher education program for elementary teachers."

The highlights of the models may be synthesized into a proposed generalized construct of elementary teacher education. The construct could undoubtedly assume any of several configurations. One configuration is suggested as a schematic representation of all the models and is shown in Figure 11.

The generalized program begins on the left side of the Figure with some statement of goals for teacher education. These goals are derived from an analysis of the projected futures of society which have been translated or interpreted as a set of behavioral objectives for children. To some extent the realization of these objectives affect the projected futures, which accounts for the double arrow symbol.

The trainee begins his program with admission to an institution of higher education. A period of liberal arts or general education constitutes a first phase. Before this liberal arts phase is completed, the trainee undergoes a screening process so that he may be admitted to the professional program in the school of education or other appropriate division of the institution. Admission to the program depends upon the student meeting certain criteria. For example, the University of Georgia Model requires an examination of high school records, completion of certain test batteries, and faculty recommendations. The model proposed by Florida State suggests selection criteria such as general college ability, commitment to education as a profession, and good health.

After admission to the program, the trainee participates in a professional sequence and in an academic subject-content sequence. The professional sequence may consist of "modules" instead of "courses," but the kinds of experiences may be similar. Different models stressed different components of the professional education sequence. The Syracuse Model emphasized an affective-human relations approach; the Toledo Model, the instructional

procedures and technology approach. Michigan State's proposal called for an Interpersonal Process Recall (IPR) technique which is a behavioral science approach. Most of the model proposals included numerous opportunities for student teaching, microteaching, and similar laboratory-oriented and clinical experiences. The University of Pittsburgh model, although not described here, stressed an individualized approach along with a clinical setting. Individualization, in most programs, was provided by allowing varying amounts of in-depth experiences in the different components of the professional sequence. This concept is represented by the different-sized squares and blocks attached to the components.

Study in academic content may include foreign languages, mathematics, social science, or any appropriate subject area of the trainee's choice relating to the elementary school curriculum. Other choices exist for trainees at various points in the program, such as pupil age-level choice or freedom to apply accumulated credits to a different area entirely.

When most of the preservice program is completed, the trainee may engage in an internship experience, as proposed by Syracuse University, or enter into a differentiated staffing assignment as provided by the University of Massachusetts model. It is at this juncture where preservice wanes and in-service waxes.

Support system were also provided. These systems are mechanisms necessary to operationalize the models. Program support systems were necessary for scheduling and organizing the programs. Information and evaluation systems provided content material and feedback; and the control support systems provide the necessary resources for implementing the programs.

CHAPTER VI

SOME SUGGESTIONS FOR ALTERNATIVES IN TEACHER EDUCATION FOR OHIO

For one man the law is loved because it is justice, while another man, the pure value-free technologist, might love the law simply as an intrinsically lovable set of rules, precedents, procedures without regard to the ends or products of their use. He may be said to love the vehicle itself without reference to its ends, as one loves a game which has no end other than to be a game . . .

— A. H. Maslow

Introduction

In this chapter will be presented several suggestions for strengthening teacher education in Ohio. These suggestions were derived from the literature and research, from the results of the Teacher Education Assessment Survey, and from current thinking on preservice education, continuing education, and differentiated staffing. The suggestions are offered in the forms of guidelines and as theoretical models. Some suggestions could be useful for improving existing programs. Others may stimulate the development of future programs. If any of them help to bring about improvements in teacher education, it will have been through the efforts of those who adapted them to the requirements of their students, their institutions, and their communities.

The models presented in this chapter attempt to provide alternative frameworks on which additional ideas may be strung. These additional ideas should come from people interested in and committed to adapting present teacher educa-

tion programs to what they think it ought to be. Without these people—professors, teachers, administrators, students, parents, researchers—this study is merely another skeleton to be added to the graveyard.¹

The first section of this chapter suggests an approach for developing theoretical models for preservice education, continuing education, and differentiated staffing. The second and third sections offer suggested models for differentiated staffing and for preservice education. The fourth section provides the groundwork for a coordinated state-wide continuing education program. Section 5 offers some suggestions for further research and study.

Several assumptions were necessary to develop the teacher education models. It was assumed that:

1. The improvement of secondary teacher education requires that the goals of the public secondary school be reexamined.
2. Suggestions for improving secondary teacher education, in the context of the present study, should be offered as theoretical constructs, or structural models, that are based on the goals of the secondary school.
3. New programs in teacher education should reflect consideration for the future of children, learning, and American social needs. Teachers need to be prepared to function for the future and for the present.
4. Teacher education can be improved only through change in a positive direction.
5. Suggestions for improving teacher education are most effective when they offer guidance in a specified direction while providing latitude for institutional needs, resources, and purposes.

¹Mary Shelly has pointed out, however, that some of man's most creative work has been through the resurrection of things scrounged from graveyards. That was once purely fiction.

6. The improvement of teacher education requires the cooperative involvement and participation of:
 - (a) schools
 - (b) colleges and universities
 - (c) the State Department of Education
 - (d) education organizations and associations such as the OEA, NEA and AFT, and professional agencies such as regional laboratories, research centers, and ERIC Clearinghouses
 - (e) local affiliates of the professional associations and organizations
 - (f) communities, including their municipal governments, businesses, civic and cultural groups, religious institutions, and youth-oriented agencies
7. Each of the above agencies have some responsibility for the education of secondary school teachers. These responsibilities should be reflected in new models to improve teacher education.
8. Each of the above agencies are accountable to each other and to the people of the State of Ohio for the fulfillment of their teacher education responsibilities. This dual accountability is necessary as long as public education remains the responsibility of and for the people of the State.
9. Effective programs in teacher education require learning experiences designed to meet the needs of preservice and in-service teachers as individuals and in groups, including the needs for love, esteem, and re-creation.²

²People who do not have a need for recovering perspective probably should not be teachers anyway.

10. Any improvement in teacher education will require different or additional resources, including money, personnel, and facilities. However, just because some of these resources may not be available, this should not inhibit thinking about possible improvements in teacher education.
11. Certain of the major findings of the Teacher Education Assessment Survey have significance for restructuring secondary teacher education in Ohio. It has also been assumed that many of the activities currently occurring in the sample institutions have relevance for strengthening teacher education.

The results of the TEAS, when coupled with recent research findings and current thinking, revealed the following as additional considerations for developing teacher education models:

**Purposes and Methods
of Preservice Education**

1. Learning experiences should move from a theoretical base to firsthand, practical experiences, and the earlier the practical experiences are provided, the better.
2. Trainees should have broad background in the functions of all educational personnel.
3. Liberal arts experiences should precede and then blend in with professional education experiences.
4. The scope and sequence of preservice experiences should reflect consideration for the personalities, backgrounds, and other qualities which trainees bring to the program.
5. The preservice program is introductory and preparatory to the field of education.
6. It may not be necessary for all preservice courses to have written behavioral objectives.

Responsibility and Accountability for Preservice Education

7. Teacher organizations and associations should have some responsibility to influence preservice education.
8. Professors who are responsible for teacher education are also responsible for keeping abreast of policies, problems and issues concerning the secondary school.
9. Liberal arts professors' responsibility for preservice education should be no different than for other professional preparation programs.
10. Preservice education requires cooperative involvement and planning between students, professors, the school, the professional groups, and the State Department of Education.

The Liberal Arts Program

11. Preservice education should include study in the humanities and the behavioral sciences, including literature, fine arts, philosophy, and general psychology.
12. Course work in communication skills, social science, and natural science would be helpful inclusions in the liberal arts.

Recruitment, Selection, and Retention

13. Just because a student can complete the requirements for a Bachelor's degree does not mean he should be a teacher.
14. Student progress should be reviewed regularly by the student and by his advisor to enable adjustments in career choice.

15. The ability to work with children should be a more significant retention factor in preservice education than high academic achievement.³
16. Educational personnel preparing to work directly with children should evidence ability to communicate effectively with children, be committed to teaching as a professional career, and be emotionally stable.
17. Teacher preparation institutions ought to try to attract students from a broad geographic, ethnic, and socioeconomic base.
18. The State of Ohio should establish legislation enabling needy but capable students to become professional educational personnel.

Psychology and Human Development

19. Preservice education should provide frequent opportunities for trainees to have direct interaction experiences with children.
20. Learning experiences in adolescent psychology, theories of learning, and developmental psychology are more effective than general introductory courses alone, such as educational psychology.
21. Learning experiences which provide some familiarity with guidance and counselling should be provided during the preservice program.
22. Preservice education ought to enable trainees to

³The value of this guideline is based on the assumption that the trainee will work directly with children. For some educational personnel this may not be a necessary assumption; however, all persons who will work with children should be able to demonstrate an awareness and sensitivity to the needs of children. This ability may be a more significant factor than grades alone.

help high school students acquire behaviors that transcend the instructional program; such as helping them to develop leadership skills, constructive value systems, and a sense of responsibility to self, family, and community.

Cultural Foundations

23. Preservice education should enable trainees to make value judgments about what is important for children and what is not, and further, these trainees ought to be able to help children make similar judgments.
24. Trainees should be aware of the current trends, problems, and issues facing education in Ohio, if not in the United States in general.

Professional Standards, Certification, Placement, and Welfare

25. Teacher preparation institutions should maintain effective placement services.
26. Teacher placement could transcend the public school. It might include opportunities in research, curriculum development, testing, technology, and other related professional fields.
27. Placement follow up is and should be a major source of feedback for evaluating the preservice program.
28. Preservice education should include background on certification and welfare procedures in general and not necessarily as it applies to a specific trainee.
29. Preservice education should certify trainees in a single broad area, even though preparation in

more than one subject area makes the placement task easier.

30. University standards for recommendation for certification ought to be based on a combination of achievement and performance standards.

Planning and Developing Learning Activities

31. Trainees should learn how to develop instructional materials, course outlines, and instructional goals, aims, and objectives more effectively by giving them the opportunity to do these things in the context of practical application rather than as theoretical constructs.
32. Trainees should be aware of the kinds of learning activities that can be developed by using resources made available through the State Department of Education, research agencies and laboratories, and the local community.
33. Trainees should become familiar with curriculum development procedures and be given opportunities to create their own instructional materials under expert guidance.
34. Trainees should be familiar with the real and potential learning contributions available through school libraries, instructional materials centers, learning resource center, and similar facilities.

Organizing and Providing for Learning Activities

35. The professional sequence should include learning experiences for trainees so that they will be able:
 - (a) to identify and provide for students' individual differences

- (b) to make available to students the necessary conditions for meeting their psychological, social, and emotional needs insofar as possible
 - (c) to establish and maintain a positive non-threatening classroom learning climate
 - (d) to utilize large and small group instruction, seminars, and other grouping strategies
 - (e) to use themselves as learning resources
 - (f) to help children express their creativity and to stimulate their imaginations
36. Preservice programs should prepare educational personnel to function independently, interdependently, and cooperatively.
37. The preservice program needs to include opportunities for educational personnel to become familiar with the use and potential use of technological contributions to learning, including:
- (a) television
 - (b) computer assisted instruction
 - (c) programmed learning
 - (d) electronic devices

Evaluating and Improving Learning Activities

38. The preservice program should help trainees learn how to evaluate student progress in a variety of ways, not just with objective tests.
39. Trainees need to learn how to evaluate themselves so that they may become constructively involved in the planning, scheduling, operation, and evaluation of continuing education programs.

Laboratory Experiences

40. Laboratory and clinical preservice experiences have more influence on behavior changes than experiences based mostly on lectures, readings, and recitation.
41. As learning activities, simulation experiences are probably superior to lectures, readings, and recitations; however, they may be inferior to laboratory and clinical experiences.
42. There is evidence that the most effective learning activity is actual in-service classroom experience.

Student Teaching

43. The student teaching experience should allow trainees to assume a total teacher role rather than just act out that role.
44. The student teaching experience should provide sufficient latitude so that trainees can experiment and try out their skills in a variety of instructional tasks.
45. The student teaching assignment should be realistic rather than idealized; that is, it should put the trainee in contact with a cross section of high school student abilities, socio-economic statuses, and other demographic variables.
46. Sponsor or cooperating teachers in the student teaching program should be competent in their respective subjects, creative, acceptable to the student teacher, and self actualizing to the extent that they can genuinely strive to build up and support the student rather than serve as critics and models.
47. The college supervisor probably should be a generalist, an expert in interpersonal relations, competent in the use of teacher-student interaction analysis, and should understand the instructional potential of various media and strategies.

48. Full-time student teaching is probably superior to part-time.
49. Student involvement in community activities has more learning benefits than staying close to the college campus.
50. Criteria for selecting and assigning student teachers should include subject area competence, mental and physical health, and personal, social, and emotional maturity.
51. A variety of settings should be provided in student teaching experiences, such as innercity, urban, suburban, and possibly rural.
52. Student teaching performance is probably the best source of data for determining needed future trainee learning experiences.

Internships

53. A four-year liberal arts degree followed by an academic year internship program is probably too long to have to wait for certification.
54. Where the internship is seen as the most appropriate route to certification, admission to the program ought to depend heavily on faculty recommendation.

Section 1. An Eleven-Step Procedure for Developing
a Model for Secondary Teacher Education in Ohio

The findings reported earlier were combined with the research and thinking of many persons to develop a comprehensive and unified approach for strengthening teacher education in Ohio. The approach is comprehensive to the extent that it (1) embodies the eleven assumptions mentioned earlier, (2) provides a broad base for the preparation of a differentiated staff, (3) allows considerable flexibility within a structured framework, and (4) serves as a conceptual resource model from which continuing education programs may be derived. It is unified to the extent that it (1) encourages cooperation among the institutions and agencies listed in item 6 above, (2) has applicability to the development of new and existing elementary as well as secondary teacher preparation programs, and (3) attempts to synthesize, among instructional staffs, the knowledge, skills, attitudes and values, and normative behaviors necessary for articulating a humanistic educational program.

The organizational basis was developed by drawing upon the works of Getzels and Thelen,⁴ and Hemphill.⁵ The psychological foundations were derived mostly from concepts developed by Maslow,⁶ Rogers,⁷ Wheelis,⁸ and Lewin.⁹

⁴Jacob W. Getzels and Herbert A. Thelen, "The Classroom Group as a Unique Social System," in Nelson B. Henry, ed., The Dynamics of Instructional Groups (Chicago, Illinois: Fifty-Ninth Yearbook of the National Society for the Study of Education, Part II, 1960), pp. 53-82.

⁵John K. Hemphill, "Administration as Problem Solving," in Andrew W. Halpin, ed., Administrative Theory in Education (New York: MacMillan, 1958), pp. 89-118.

⁶Abraham H. Maslow, Motivation and Personality (New York: Harper & Bros., 1954); and Abraham H. Maslow, "A Theory of Metamotivation: the Biological Rooting of the Value-life," Journal of Humanistic Psychology (Vol. 7, No. 2, Fall, 1967).

⁷Carl Rogers, On Becoming a Person (Boston: Houghton Mifflin Co., 1961).

⁸Allen Wheelis, Quest for Identity (New York: W. W. Norton, 1968).

⁹Kurt Lewin, "Group Decision and Social Change," in E. E. Maccoby, T.M. Newcomb, and E. L. Harley, eds., Readings in Social Psychology (New York: Henry Holt & Co., 1958, 3rd edition), pp. 197-211.

Step One

Reexamination of the goals of secondary education. People concerned with learning and teaching frequently are concerned with the goals of education. New goals are often suggested as old ones are reviewed and revised. These new and revised goals have added to the tasks of the schools and have given the schools increased social responsibility. For illustrative purposes, the goals developed by the Committee for Economic Development are apropos:

Whatever else may be set as a proper goal of education, it can at least be said that a school does not fully succeed unless it makes learning an interesting if not exciting experience; unless it effectively generates intellectual curiosity, a love of knowledge, and an open mind; unless it encourages a genuine incentive to create and the ability to think clearly; and unless it magnifies the self, establishes personal identity, and encourages individuality....

In stressing the value of knowledge, we are not proposing that the elementary and secondary schools be designed simply as preparatory to college and university education. Far from it. Although an increasing proportion of young people should seek university educations, many others should receive good vocational educations on the secondary level or should go on to technical schools or to vocationally oriented programs in community colleges.¹⁰
[Italics added.]

If the accomplishment of these or similar goals are accepted as a legitimate obligation of the schools, then the schools will need to prepare themselves accordingly.

Step Two

Define the criteria for an instructional program that could accomplish these goals.¹¹ These criteria should be consistent with the goals of the school. For

¹⁰ Committee for Economic Development, Innovation in Education: New Directions for the American School (New York: the Committee, 477 Madison Avenue, July, 1968), p. 37.

¹¹ By "instructional program" is meant the planned sequence of learning activities made available by the school.

example, one criterion could require that the program be interdisciplinary so that it transcends "subject-matter" lines. This may be necessary if the goals of creativity or intellectual curiosity are to be achieved. Other criteria could require a program that is humanistic, experiential, individualized, problem-solving, and inquiry based. This step could have been "to enumerate how the goals of the school can best be accomplished." Since these goals may vary, so may the ways in which they are attained.

Step Three

Identify the objectives of an instructional program to meet these criteria. These too will vary among school districts, depending upon administrators' perceived needs of their schools and communities, teachers' perceptions of the needs of the students and themselves, and factors such as state and local requirements and policies. College entrance requirements, political and financial pressures, special interest groups, and similar influences also affect the scope and quality of the program. Because of these factors, there may be no "one program" which is equally appropriate for every district. Regardless of the program selected, it ought to reflect the human growth and developmental needs of children. For many years the Educational Research Council of America in Cleveland has attempted to develop such a program. Their efforts have included production of the Greater Cleveland Mathematics Program, the Greater Cleveland Physical Education Program, the Greater Cleveland Reading Program, the Educational Research Council Social Science Program, and the Educational Research Council Science Program. Other cooperatively developed ERC programs include foreign languages (French), humanities, family life education, mental health, and prekindergarten.

Numerous other sources exist too, including new programs in science such as that developed by the American Association for the Advancement of Science, and mathematics such as the University of Illinois Committee on School Mathematics Program.¹²

Step Four

Describe the learning activities and experiences necessary to accomplish

¹²Cf.: Robert D. Heath, ed., New Curricula (New York: Harper & Rowe, 1964); and Forest E. Conner and William J. Ellena, Curriculum Handbook for School Administrators (Washington, D. C.: American Association of School Administrators, 1967).

the objectives of the secondary school instructional program. These experiences should be designed to facilitate the development of concepts, cognitive knowledge, attitudes, and emotional patterns of behavior when the child is on his own. Examples include laboratory experiences, field trips, simulation and games, small group discussions, reading, and participation in seminars. This process will undoubtedly require a reexamination of teaching roles and responsibilities. These redefined roles will reflect newly established goals and learning programs.

Step Five

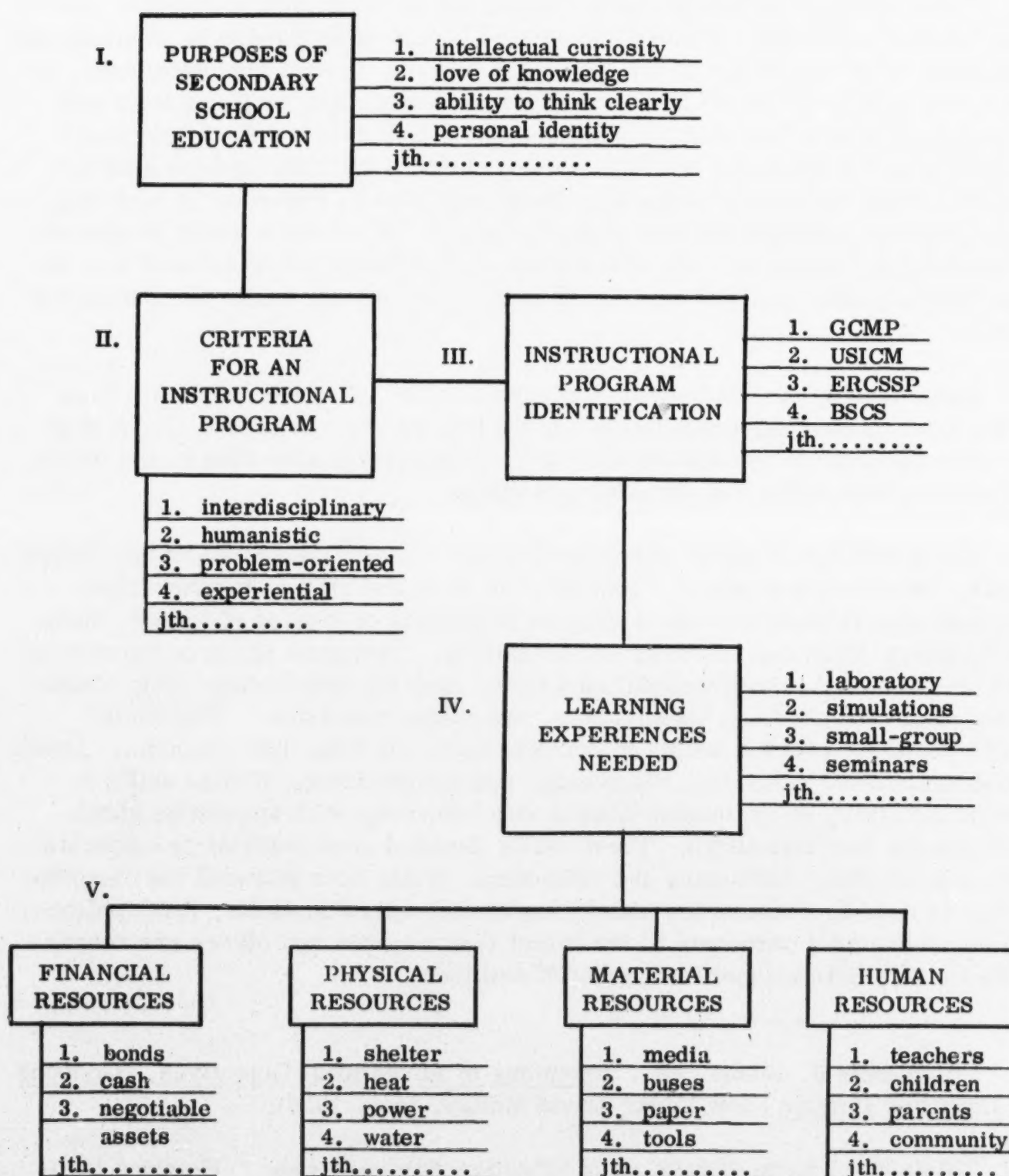
Identify the resource components necessary for making these learning activities and experiences available to secondary school students. Four resource components were identified: financial, physical, material, and human. Financial resources are needed to pay for the other three. Physical resources, such as power and shelter, were considered necessary to house the students and programs. Material resources included the equipment, supplies, instruments, and other aids used in operationalizing the instructional program. Human resources, the most important component, includes teachers, administrators, students, parents, and business, civic, and cultural leaders in the community concerned with the education of children. Certain of these people are more closely affiliated with implementing the instructional program than others. Those most directly concerned, such as teachers, principals, and guidance counselors, are the ones for whom this model is especially developed. For present purposes, these people are collectively called educational personnel. Figure 12 schematically illustrates steps one through five.

Step Six

Identify the kinds of knowledge, skills, attitudes and values, and observable normative behaviors educational personnel need to have in order to implement the instructional program. Observable normative behaviors are those teacher acts, verbal and nonverbal which exemplify and demonstrate constructive and healthy adult behavior. For present purposes, "normative" is intended to mean "exemplary," that is, teachers should act in ways they believe healthy adults should act and not necessarily as many adults do act. For example, smoking marijuana may be normative behavior among students in certain schools, but that does not mean teachers in those schools should adopt that behavior; especially if they feel it would be wrong to do so.

None of the educational personnel is required to possess all the qualifications identified; however, any given school should have people with certain of these qualifications such that a wide range of educational personnel qualities is

Figure 12 — Schematic Representation of the Primary Phase (Steps 1-5) of a Model for Secondary Teacher Education



available to every student. It is the task of teacher education to establish and maintain a supply of people who have certain of these qualities. For present purposes these qualities or characteristics were identified as belonging in either the cognitive or affective domains.¹³ It is shown schematically in Figure 13.

Three kinds of knowledge were categorized in the cognitive domain: subject-matter knowledge, of those specialized bodies of knowledge in an academic discipline normally taught in the secondary school, liberal arts knowledge, or general education; and professional education knowledge, or those facts and concepts related to learning and instruction such as curriculum development and the understanding and consideration of children and other school staff as people. Professional education knowledge may also be regarded as including that system of concepts derived from the behavioral sciences which is related to teaching and learning. The three kinds of knowledge just mentioned are related to each other and are used by educational personnel during their teaching acts.

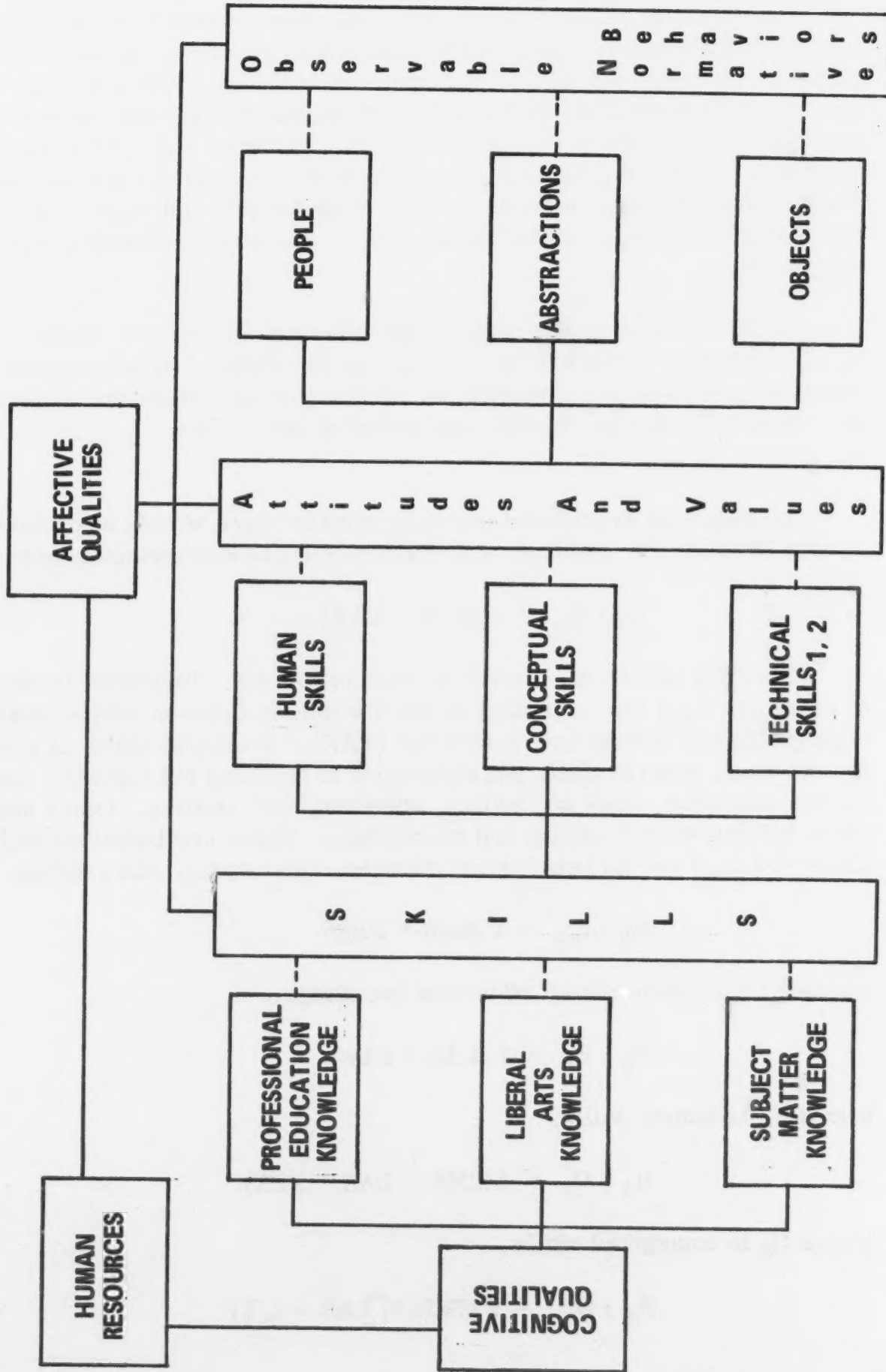
Some overlap occurs between the cognitive and affective domains. Some of the kinds of overlap are indicated by the broken lines in Figure 13. It may be more accurate to say that certain kinds of knowledge give rise to and interact with certain skills and attitudes and values.

Three classes of skills were adapted from Katz:¹⁴ technical skills, human skills, and conceptual skills. Two types of technical skills were identified. One type was related to skills developed in general or liberal education, such as speaking, listening, writing, and computing. Technical skills of the second type were related to professional education, such as videotaping, using educational television, making lesson plans, and taking attendance. Conceptual skills had to do with the ability to combine facts and ideas into concepts. These abilities included analyzing, diagnosing, and synthesizing. Human skills included the ability to synthesize liberal arts knowledge with knowledge about children and how they learn. These skills included such abilities as empathizing, interviewing, discussing and reflecting. While Katz intended his classification system as a means for identifying basic leadership skills, it is applicable to educational personnel to the extent that teachers and others are responsible for the instructional leadership of children.

¹³Benjamin S. Bloom, ed., Taxonomy of Educational Objectives, Handbook I: Cognitive Domain (New York: David McKay, Inc., 1956).

¹⁴Robert L. Katz, "Skills of an Effective Administrator," Harvard Business Review (Vol. 33, January-February, 1955), p. 1.

Figure 13—Schematic Representation of Human Resource Qualities
Necessary for Educational Personnel



Attitudes and values were also put into three classifications. The first refers to attitudes and values toward children as groups of people, such as ethnic groups, nationalities, religious groups and cultures. Attitudes and values toward children as individuals, and other points of view and feelings about self and other human beings are also included. Attitudes and values about objects constitute the second classification, and include points of view and feelings about inanimate things such as games, foods, media and materials. The third classification includes abstractions such as morality, esthetics, loyalty, and spirituality.

The third component quality in the affective domain was observable normative behaviors. These are acts or behaviors exhibited by educational personnel which demonstrate and exemplify to and for self and others the enactment of the individual's knowledge, skills, and attitudes and values.

The following hypotheses are suggested as ways to look at certain interactions between the cognitive and affective qualities described above:

$$H_1 : t_{s1} = f (SMK * LAK)$$

This first hypothesis should be read as follows: Teachers' technical skills of class one (t_{s1}) are a function of the interaction between subject matter knowledge (SMK) and liberal arts knowledge (LAK). Technical skills of class one refers to those general skills not indigenous to teaching but typically accompany formal education, such as reading, speaking, and writing. Other skills are more indigenous to learning and instructing. These are technical skills of class two (t_{s2}) and include lesson planning, videotaping, and grading.

$$H_2 : t_{s2} = f (SMK * PEK)$$

where PEK is professional education knowledge.

$$H_3 : H_s = f (LAK * PEK)$$

where H_s is human skills.

$$H_4 : C_s = f (SMK * LAK * PEK)$$

where C_s is conceptual skills.

$$H_5 : O_{av} = f (SMK * [LAK + t_s])$$

Where O_{av} is attitudes and values about objects. This should be read as: Attitudes and values about objects are a function of the interaction between subject matter knowledge and liberal arts knowledge plus technical skills.

$$H_6 : A_{av} = f (SMK * LAK * [PEK + C_s])$$

Where A_{av} is attitudes and values about abstractions.

$$H_7 : P_{av} = f (LAK * [PEK + C_s] * H_s)$$

Where P_{av} is attitudes and values about people.

$$H_8 : ONB = f (SMK * LAK * [PEK + t_{s12}] * C_s * [H_s + D_{av}] * A_{av} * P_{av})$$

Where ONB is observable normative behaviors.

It is important that the context in which these hypotheses are presented is not taken to mean that the functional relationships expressed are necessarily subject to the laws of mathematics. They are presented only as illustrations of how cognitive and affective qualities are interactive and interdependent. These functional interactions are shown schematically in Figure 14.

Figure 15 gives some examples of the kinds of cognitive knowledge and affective qualities educational personnel might need to implement a comprehensive instructional program for secondary school students.

Step Seven

Identify alternative ways for educational personnel to acquire and develop certain of these kinds of knowledge, skills, attitudes and values, and observable normative behaviors. The following assumptions and considerations were necessary for this step.

1. It was assumed that preservice education should emphasize the development of certain patterns of observable normative behaviors which, when exhibited, can facilitate certain observable behavior changes in others or in self.¹⁵

¹⁵By "facilitate" is meant to make easier or to help by encouraging, but not to be a direct cause of or major reason for the behavioral change.

Figure 14 — Schematic Representation of the Functional Interactions
Between Cognitive and Affective Qualities

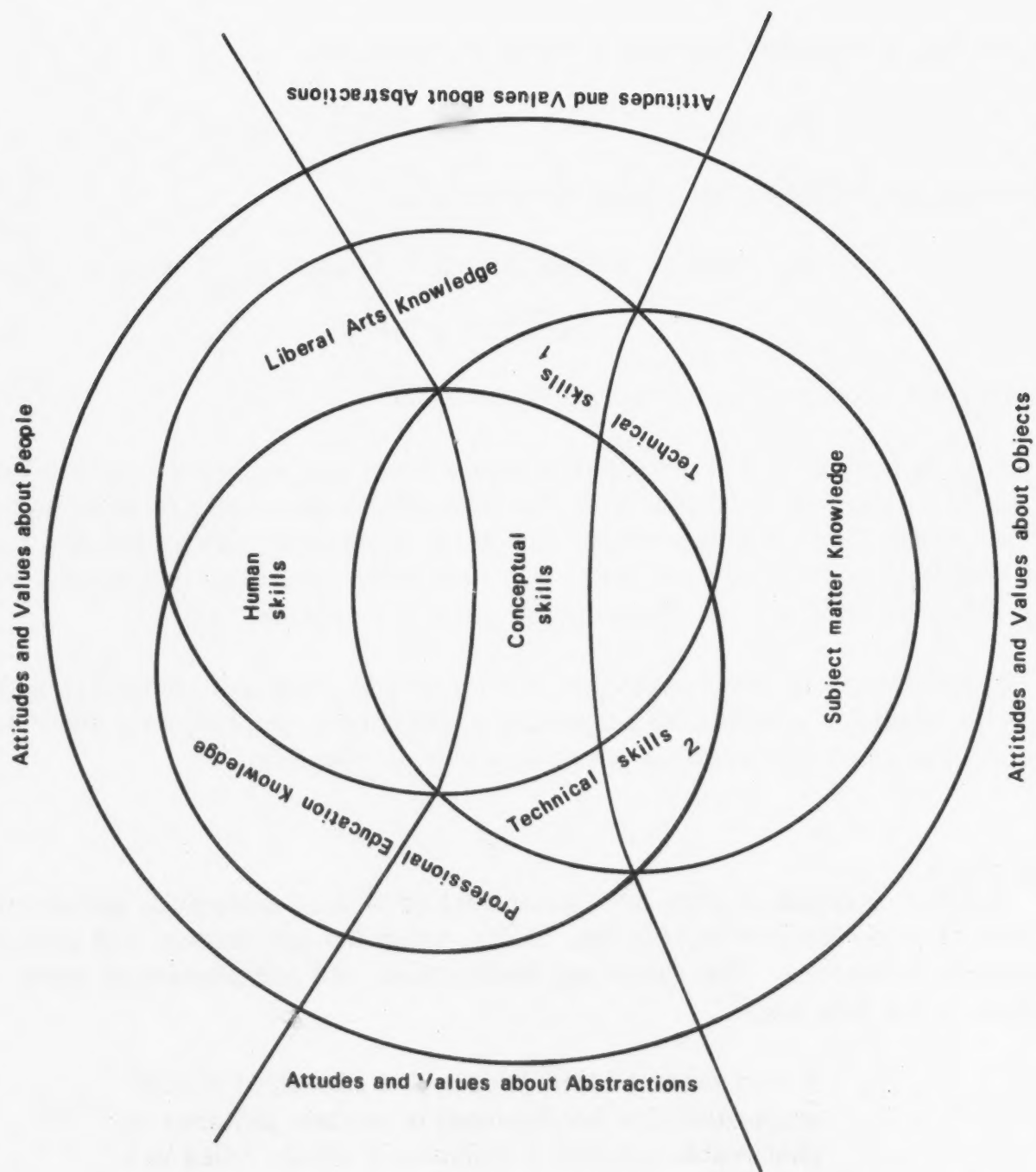
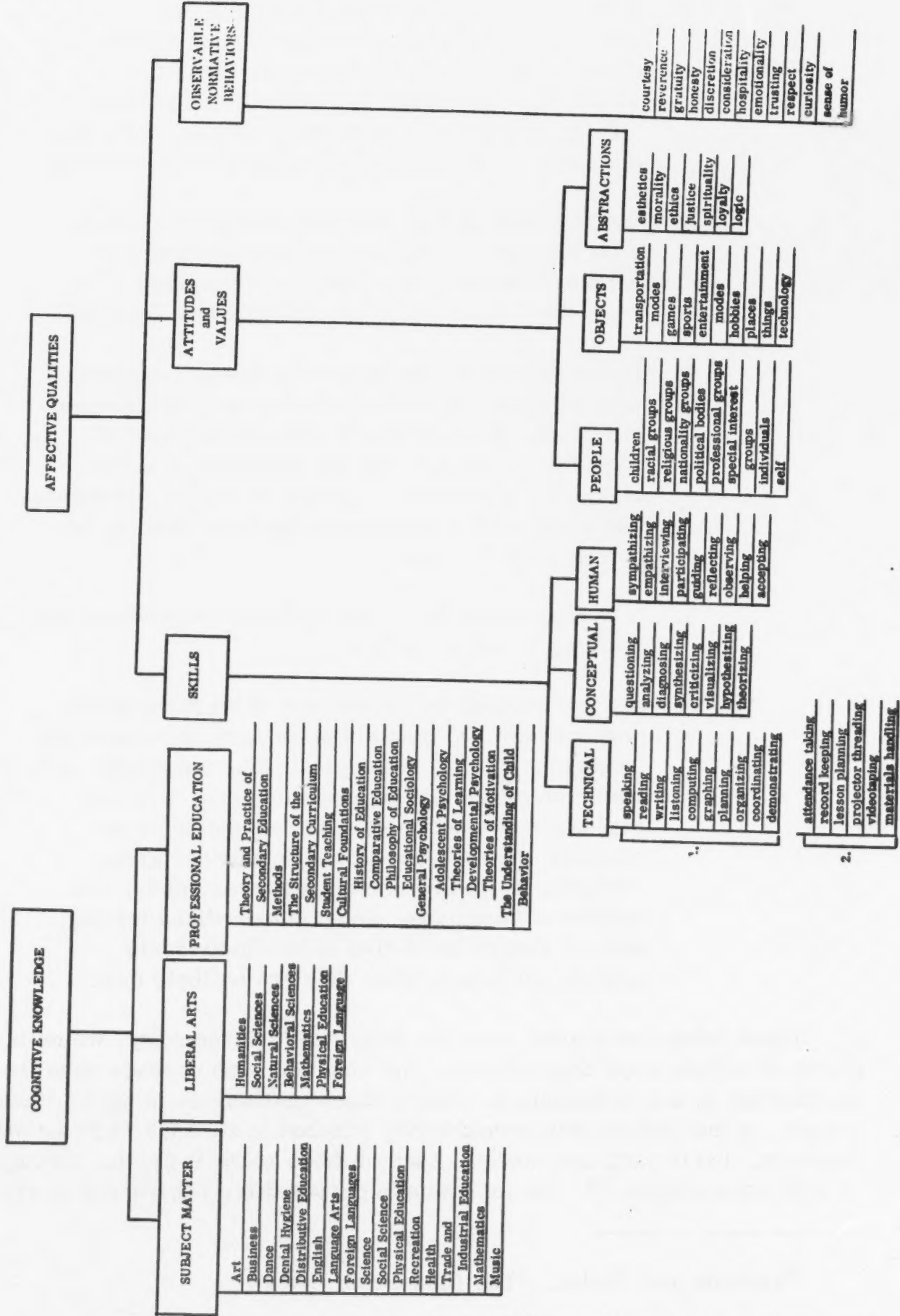


FIGURE 15 - SOME EXAMPLES OF COGNITIVE AND AFFECTIVE QUALITIES NEEDED IN TEACHER EDUCATION



2. It was assumed that every individual has potential for acquiring and developing certain observable normative behaviors. This includes the assumption that educational personnel can realize, perhaps better than most people, a feeling for the importance of continued learning.
3. It was assumed that every educational personnel staff member can be expected to acquire only certain subsets of the explicit and implicit requisites of the cognitive and affective domains.
4. It was assumed that every educational personnel staff member, whether preservice or in-service, has potential for adding to his existing fund of cognitive knowledge and for expanding and revising his repertoire of skills, attitudes and values, and observable normative behaviors, that is, he can learn how to learn.
5. It was assumed that every individual's potential for learning is unique to him.
6. It was assumed that evaluation of learning is dependent upon the analysis of changes in observable behavior. Since knowledge is what one knows, and observable behavior is what one does, then the evaluation of what one knows depends upon an analysis of how his observable behavior gives evidence of what he knows; however, some evaluations of knowledge, as by standardized testing, are not always indicative of how individuals actually do behave when they are on their own.

These behaviors depend upon the individual's personality, which is composed of certain need-dispositions. His behavior also depends upon the social institutions in his environment. One of these institutions is the secondary school. It has certain role constituents attached to it, such as principals, teachers, and department heads. Each of these roles is defined through a set of role expectations.¹⁶ The individual's personality, regardless of whether he

¹⁶Getzels and Thelen, "The Classroom Group."

is a teacher or a guidance counselor, affects the way he perceives his role; and his perception of his institutional role will be a major influence on how he behaves in that role.

The individual's role perception may not always be congruent with how the institution perceives what his role should be. When that happens there is conflict between the functions of the school and its locus as an institution. Since the school is a social institution, the observable behaviors of educational personnel are derived simultaneously from the school and the individual; that is, the individual's behavior results from his efforts to fulfill his role expectations in ways that are congruent with his own personal needs.¹⁷

7. It was assumed that there are certain types of educational personnel whose need-dispositions tend to be congruent with the role expectations of the school. There are also those whose need-dispositions tend to be congruent with the role expectations of the students.

Teachers who fulfill their institutional role under such conditions may find it difficult to meet the needs of children. Consider this statement by Getzels and Thelen:

If one thinks of authority, control, and leadership in political terms, it is clear that the classroom group, at least in its formal aspects, is about as far from democracy as one can get. Not only do the students have no control over the selection of their leader, they normally also have no recourse from his leadership, no influence on his method of leadership beyond that granted by him, and no power over the tenure of his leadership. There are very few working groups in our society in which these essentially despotic conditions are legitimately so much the rule.¹⁸

¹⁷Cf.: Kurt Lewin, A Dynamic Theory of Personality (New York: McGraw Hill, 1935), Chapter III; also Jacob W. Getzels, "Administration as a Social Process," in Halpin, Administrative Theory, pp. 150-165.

¹⁸Getzels and Thelen, "The Classroom Group," p. 56.

Hart has commented that:

Most [students] soon learn that bringing complaints home is likely to be useless. They fear, as parents do, that a protest to the school will likely fail and perhaps invite retaliation.

Most complaints to the school do fail. As we shall see, under the classroom system teachers, good or bad, "own" their classrooms.¹⁹

Many teachers respond to parents and students the way they perceive the principal would expect them to respond. This is an "institutional" response and is made in defense of the school. There are some teachers who respond to parents and students in the way they perceive the parents and students would expect them to respond. This would be in defense of the parents and students. An individualized high school program requires that teachers respond to the learning needs of students rather than to the institutional needs of the school. For example, the National Education Association has remarked that

Efforts to meet the individual needs of children are frequently hampered by types of school organization that literally block the use of appropriate and efficient ways of dealing with the child as an individual. It is a discredit to us and a disservice to children to say that we believe in each child's working at the level of his own potential and at the same time, subject him to a common course of study, a comparative marking system, a predetermined structure within which to work, and general goals that may or may not be applicable to him.²⁰

Some schools operate more for the maintenance of the institution rather than for the advancement of the students. This could result from a lack of preparation in the understanding of human behavior. Data in Chapter IV indicated

¹⁹ Leslie A. Hart, The Classroom Disaster (New York: Teachers College Press, Teachers College Columbia University, 1969), p. 13.

²⁰ Elementary School Organization (Washington, D. C.: Department of Elementary School Principals, National Education Association, 1961), p. 16.

that teachers, administrators, and students agreed that professional knowledge and skills in this area were vital. However, college professors indicated that the planned development of such knowledge and skills during the preservice program may not always be available. When teachers and administrators lack these understandings, schools run the risk of functioning for the wrong purposes. When school libraries are maintained for librarians, or when industrial arts shops and science laboratories are constantly locked and made available only to select groups of high school students and faculty, the school may be guilty of catering to a privileged few rather than to the needs of all. Instead of helping students feel like partners in school ownership, some schools exploit their students. When children are required to put their chairs up on desks at the end of the school day "so the custodian can clean," not so they may learn the importance of helping others, the school may be guilty of imposing irrelevant tasks on children rather than teaching values. At lunch they may be required to clean floors. Some sandpaper desks at the end of the school year. The point is that when students are made to feel they are attending school for the benefit of institutional maintenance, the values of learning and education are lost for them.

Some institutional demands such as fire and civil defense drills and medical examinations are obviously helpful as well as necessary, especially when they concern health and physical safety. But when most of the school day is taken up with exploitative demands, community and student reactions become imminent. For example, the 1968 "Riot Report" of the President's Commission stated:

The hostility of Negro parents and students toward the school system is generating increasing conflict and causing disruption within many school districts.... the most dramatic evidence of the relationship between educational practices and civil disorder lies in the high incidence of riot participation by ghetto youth who had not completed high school. One survey of riot cities found that the typical riot participant was a high school dropout.²¹

There is considerable evidence, as presented in the previous chapter, that a substantial number of people who are attracted to the field of education and become teachers are of the institutional or "nomothetic" type. Persons of this type tend to be task-oriented and may not, as the future draws close, continue

²¹Report of the National Advisory Commission on Civil Disorders (New York: Bantam Books and the New York Times Co., 1968), p. 425.

to be appropriate for implementing all the reexamined goals of secondary education. Personnel of the individualized or "idiographic" type are sometimes referred to as person-oriented and will be needed more urgently if a humanistic, individualized, and inter-disciplinary program is to be articulated in the schools in the foreseeable future. This problem has been compounded by preservice programs and certification requirements that have continued to be designed and implemented in Ohio. Some of the new certification requirements that will become effective in Ohio in 1972 are an attempt to change this situation. Many traditional preservice and continuing education programs were developed by and for people with more concern for maintaining the status quo than for planning for positive change. Certain conditions are occurring now to challenge this pattern.

For one thing, America's median age has lowered to nearly 25. For another, the educational attainment in this country has reached a median of 12.1 years for persons over 25 years old—an increase of 1.5 years since 1960. Psychologists such as Maslow, Goffman, and Rogers, and sociologists such as Reisman and Wheelis have suggested our society is in danger of becoming too dehumanized, too impersonal, too technocratic and too mechanistic to continue to pursue America's basic tenets as life, liberty, and the pursuit of happiness. McLuhan, Goodman, Holt, and Friedenberg have pointed out that the institution of the American public school, as currently conceived and operated, is simply not appropriate or able to achieve the goals for secondary education as suggested by the Committee on Economic Development. Critics of education charge that patterns of school staffing and programs of school curriculums are presently incapable of providing the kind of instructional program which constructively contribute to the development of person, of self, or of humanistic growth. Friedenberg says, for example,

The self-esteem of adolescents is threatened in the school by two intricate and quite unintended social tensions. There is, first, a matter of invidious class distinctions; of teachers and a small but dominant group of youngsters of superior social status disparaging the vast majority of working-class youngsters who attend school or who find it intolerable and drop out of it. But of far greater importance are certain patterns of value, attitude, and anxiety which are frequently encountered among teachers and school officials and which seem to be linked to their experience of life at the social level from which most school personnel are recruited. These values, attitudes, and anxieties may not be directed against the lower-

status adolescent, but they are insulting to the process of adolescence itself.²²

The overall results of the Teacher Education Assessment Project help support some major critics of teacher education and of our schools: teachers are being trained in obsolete patterns to assume obsolete roles in obsolete schools. It is hypothesized that as the institutional role expectations of teachers continue to change, the need-dispositions of the teachers currently in service become more incongruent with those roles. This may be a major factor contributing to teacher frustrations including reluctance to accept these role changes, negotiation problems, strikes, and general militancy. It may also account for much of the student reactions to the school and to social institutions in general. For the school to be effective it has to meet simultaneously the needs of the students and the teachers. There is some evidence that our schools are guilty of obviating the personal needs of both students and teachers in favor of the institution. Clearly, the needs of the students must be met; and so must the needs of the teachers if solutions to the problems stated above are to be found. Some reduction in this conflict situation may be found in improved patterns of staffing, in more adequate programs of preservice education, and in more meaningful opportunities for continuing education.

8. It was assumed that the most effective differentiated staffing roles should be determined according to the kinds of instructional tasks that need to be accomplished.

These task-roles should be filled by educational personnel with attitudes, commitments, and need-dispositions that are congruent with the new teaching roles. The instructional tasks would be determined by the kinds of learning experiences the children need to articulate the instructional program. Teachers and other educational personnel could pool their skills, talents, and capabilities to implement the program. Student learning activities could be organized according to the availability of teachers' knowledge, skills, attitudes and values, and normative behaviors.

Differentiated staffing schema should be based on the most effective utilization of staff talent for developing student talent. Since so many persons have a wide and useful range of abilities, many exciting learning opportunities for

²²Edgar Z. Friedenberg, The Vanishing Adolescent (New York: Dell Publishing Co., 1959), pp. 110-111.

children can be provided by the school. This could mean that team-member responsibilities can be based on teachers' talent rather than on seniority.

9. It was assumed that the most effective pre-service secondary education programs are designed to move from a generalized instructional role preparation to a specialized one.

Few persons can be expected to know which instructional task-role they will assume after completing preservice education. Most trainees will be encouraged in certain directions according to their own need-dispositions, others' responses to their behavior, and by their own personal interests and desires. As the trainee advances through his preservice program, certain task-role decisions can be made by him and by others. Many final task-role choices and decisions could be deferred until the beginning in-service years. Some of the kinds of choices available are described in later sections on differentiated staffing and preservice education.

Step Eight

Identify the characteristics of persons with potential for the efficient acquisition and development of the necessary knowledge, skills, attitudes and values, and observable normative behaviors. In the context of the model being developed, certain prospective educational personnel will need to give evidence of several characteristics. These characteristics will vary among individuals, but should include the following abilities:

1. to make positive and constructive contributions that facilitate the growth of others and self
2. to get along with others, including colleagues, students, and members of the community
3. to be responsive to the needs of others and self
4. to benefit from the experiences of others and self
5. to add to their existing knowledges, skills, attitudes and values, and observable normative behaviors
6. to love and be loved by others

Other qualifications such as good mental, emotional, and physical health, suitable moral character, and like attributes for wholesome educational personnel should also be included.

Step Nine

Recruit, select, and enroll the trainees in the preservice program. The recruitment and selection procedures should depend upon criteria such as those suggested in step eight. Persons accepted into the preservice program should be selected according to a variety of measures. Admissions should be selective to the extent that they screen out those individuals who lack the characteristics in step eight. For some persons, certain characteristics may be developed after entering the program. Admissions procedures should be objective to the point that persons with potential for personal growth and for contributing to education are not denied that opportunity.

The usefulness of basing admissions on traditional evidences of academic ability is being challenged and the conventional standardized test scores on the College Entrance Examination Board and on the Scholastic Aptitude Test may be waning in importance. Admissions officers have been finding that students who score high on entrance examinations are not always the most appropriate ones for selection. Mendenhall, President of Smith College in Northampton, Massachusetts, recently remarked:

The limited significance of these high [CEEB and SAT] scores has long been known and is increasingly recognized. Not only do they give only the most superficial, transitory indication of motivation and purpose, but also their value becomes increasingly limited with applicants from deprived backgrounds or inferior schooling.²³

For another thing, high school students who have many years of test-taking practice and who attend special classes and review particular books on "How to take the College Board Exams" have a tremendous advantage over those who either do not have or cannot afford to have such opportunities available to them. Finally, by placing so much emphasis on academic ability, the institutions

²³Thomas C. Mendenhall, "Admissions Policy: Implications and Consequences," ERIC-IRCD Bulletin (New York: Teachers College, Columbia University, Eric Information Retrieval Center on the Disadvantaged, Vol. 5, No. 5, Winter, 1969), p. 6.

themselves are in danger of maintaining a student body that is racially and socio-economically imbalanced. This is because of the strong association between test scores and socio-economic status. Public institutions especially, cannot continue this potentially discriminatory practice.

Hugh Lane, President of the National Scholarship Service and Fund for Negro Students, has suggested five necessary changes in admissions procedures if higher education is to be more accessible to minorities such as the poor, the black, the Chicano, the Puerto Rican, the Indian, the Appalachian, and the generally disenfranchised. Since every person who can and wants to make constructive contributions to the education of children should be given the opportunity to do so, Lane's suggestions have significance for the present model:

1. We must emphasize the development of human potential rather than the identification of talent.
2. We must move toward open admissions rather than selective admissions.
3. We must include all groups rather than favored groups.
4. Our emphasis must shift to teaching and learning and away from tests and measurements designed to distinguish the deserving from the undeserving.
5. Our use of tests and measurements must become diagnostic and generate statements about the specific student specifying the conditions under which he can learn rather than normative and merely comparing him with characteristics of other students.²⁴

Step Ten

Extend the preservice program beyond provisional certification in the form of continuing education and include new skills programs, refinement programs,

²⁴Hugh A. Lane, "Admissions Procedures in Transition: Some Interrelations," in *Ibid.*, pp. 3-4.

and innovation programs.²⁵ Eighteen suggestions for improving continuing education programs have been offered in Chapter V.²⁶ Additional suggestions for an interdependent model for continuing education are made in Section 4 of the present chapter.

Step Eleven

Establish carefully designed methods for evaluating preservice and continuing education continuum. Guidelines for evaluating preservice education should be based on comparative analyses between the goals of the preservice program and the outcomes. Such analyses will depend upon several factors, including:

1. Prompt and objective feedback from many sources, such as
 - (a) schools
 - (b) clinic and sponsor teachers and professors
 - (c) secondary school students
 - (d) trainees
 - (e) professors on campus
2. The establishment of ways to revise preservice programs quickly enough to provide adequate responses to the needs of children
3. Teacher educators who evidence the kinds of observable normative behaviors they expect of trainees, for example:
 - (a) adaptability
 - (b) resourcefulness
 - (c) flexibility
 - (d) nondefensiveness
 - (e) psychological security
4. The availability of resources to establish and

²⁵See pp. 222 ff., supra.

²⁶See pp. 222-224, supra.

maintain effective feedback, analysis, revision systems

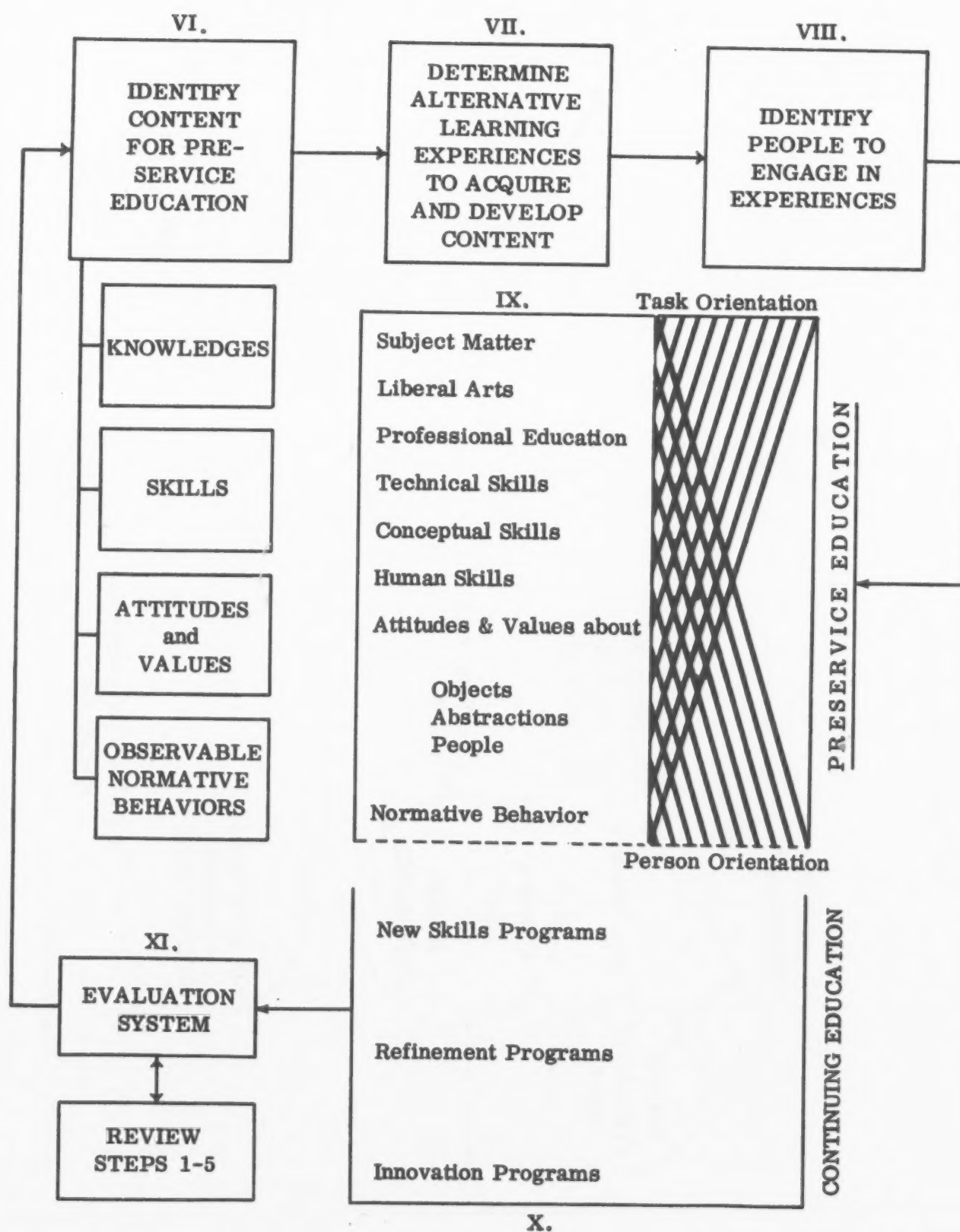
A schematic representation of steps six through eleven is shown in Figure 16. It is suggested that preservice and continuing education evaluation, as described in step eleven, be conducted as outlined in Figure 17. This managerial control system was originally designed for industry but has applicability to the present model.

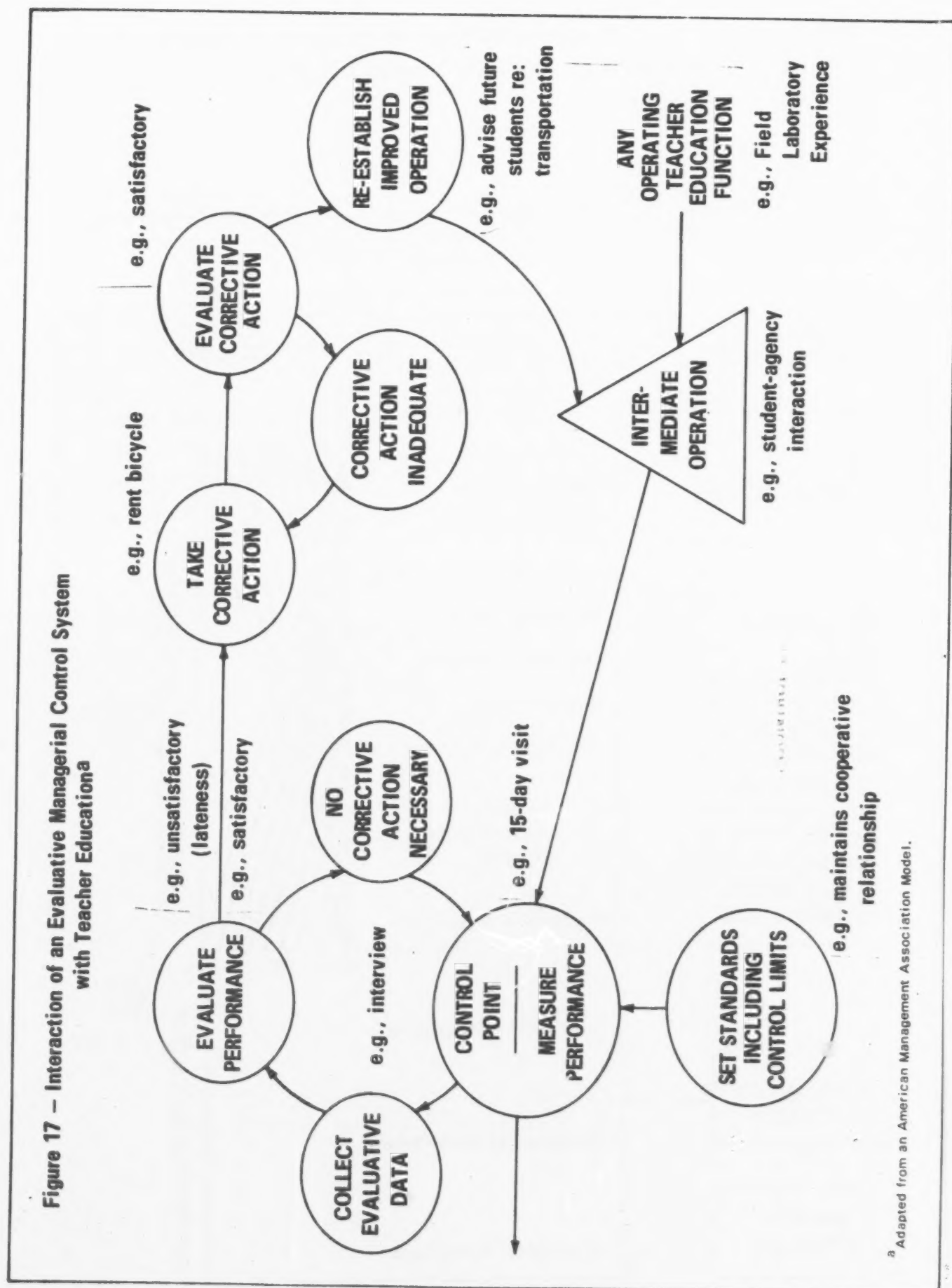
Section 2. A Suggested Model for Secondary School Differentiated Staffing

This section offers some suggestions for organizing secondary school instructional staffs so that the goals of the school may best be achieved. The major assumptions underlying this model are:

1. The American public school can be an acceptable means for achieving an education.
2. The function of educational personnel is to facilitate the accomplishment of the newly established goals for secondary education.
3. The present system of staffing the public schools of Ohio is subject to change, including the requirements for certification, the legislated regulations effecting that system, and the ways in which such staff is currently organized.
4. Patterns of school staffing may be revised through appropriate programs of preservice and continuing education.
5. The kinds of people currently practicing as educational personnel in Ohio's public secondary schools can, through continuing education, learn to assume new roles.
6. There are some functions which are common to every instructional employee of a school system. These common functions include:

Figure 16 — Schematic Representation of the Secondary Phase (Steps 6 - 11)
of a Model for Secondary Teacher Education





- A. to place the welfare of children first in importance in all school activities
- B. to know pupils as individuals and to work with them as people
- C. to create a climate whereby students will get to know teachers and administrators as individuals
- D. to demonstrate consideration of others in all relationships
- E. to be regular in attendance and in the avoidance of tardiness
- F. to plan and organize work for maximum efficiency
- G. to make every effort to observe common sense safety rules and regulations
- H. to contribute to a constantly improving program of school-community relations
- I. to be loyal to the school system—its policies and objectives
- J. to channel suggestions for improvement to those who have the responsibilities for that area and to do this in a pleasant, helpful manner
- K. to maintain high ethical standards in all relationships

It was noted earlier that some teachers have need-dispositions more congruent with a mediator-of-knowledge or transmitter-of-the-culture role than with the facilitator-of-learning role. It is hypothesized that teachers whose personal needs can be met through a facilitator role tend to be person-oriented and impulsive, while those who seek reward in the mediator-transmitter role tend to be task-oriented and self-controlled.

Teachers who gravitate towards the person-oriented end of the continuum are inclined to operate in the individual or "idiographic" realm. They tend to have individualistic relationships with children such as being warm and friendly, considerate, accepting, trusting, democratic, loving, and sympathetic.²⁷ They are also the kinds of people who place a minimum premium on rules and regulations. For example, they are frequently late, hand in reports that are overdue, have messy classrooms with too much noise, welcome new faces, and in general have limited regard for "administrivial" routines. Children may love these people because they do not feel threatened or intimidated by them. Learning with these teachers is relaxed and geared toward what the children need to do rather than what the school needs to have done. "Task-oriented," or nomothetic teachers are suspicious of them.²⁸

Nomothetic teachers are inclined to stress goal accomplishment, adherence to rules and regulations, and the maintenance of centralized authority. Student progress may be measured in terms of work done or objectives completed. These teachers are usually aloof, systematic, efficient, dogmatic, insecure, self-centered, authoritarian, and neat. They may have orderly classrooms, quiet, controlled learning activities, and desks that reflect the motto, "A place for everything and everything in its place." These people are punctual and abhor tardiness. They respect hard work, especially when it is done their way. They love children only when they listen carefully, follow instructions, and do well on objective tests. The children respect them. Person-oriented teachers feel sorry for them.

It is emphasized that no person would be expected to fit the idiographic or nomothetic descriptions perfectly. Virtually all teachers would be somewhere between those extremes. For this reason the terms "person-oriented" and "task-oriented" are used. These terms indicate a tendency or orientation toward a certain direction.

School district employees may be divided into two categories, Instructional Resource Specialists and Support Services Personnel. The Support Services

²⁷Cf.: Andrew Halpin, Theory and Research in Administration (New York: MacMillan, 1966); Chris Argyris, Personality and Organization (New York: Harper, 1957); and Milton Rokeach, The Open and Closed Mind (New York: Basic Books, 1960).

²⁸Cf.: Herbert R. Kohl, The Open Classroom (New York: Vintage Books, 1969).

personnel include Pupil Personnel Services, Administrative Services, Auxiliary Services, and Community Services. These groups have a supportive role in implementing the instructional program.

The Pupil Personnel Services includes guidance and counselling services, psychological services, nursing, dental, and speech and hearing services, and other personnel necessary for maintaining students' emotional, psychological, and physical health.

Administrative Services include those responsible for long-range planning, budgeting, staffing, coordinating, organizing, and the general managerial functions of the school. Some administrative personnel have responsibility for more direct instructional leadership, including functions such as coordinating continuing education programs, providing for curriculum development, overseeing the general scope and sequence of the instructional program, organizing the Pupil Personnel and Community Services, and encouraging experimentation and innovation, even if they disagree with it.

Auxiliary Services comprise those persons who have direct responsibility for the daily operation of the school. People in this group include transportation workers, custodial and food service employees, certain clerical personnel, and attendance officers. Community Services is made up of those persons in the community who support the articulation of the instructional program. Many of these people act as learning resources by helping students as when an artisan demonstrates his skills for a group of children or when a political official discusses certain facets of his civic role with them. Other members of the community serve in a volunteer capacity as in a learning resource center, as a cafeteria helper, or as a classroom helper. Since the persons in the community services group are not a regular part of the school staff, they were included among the Support Services Personnel rather than the Educational Resource Specialists.

Instructional Resource Specialists include four groups. The first may be called Learning Specialists (LS) and is made up of educational personnel who have continuous direct interaction with students. The LS has a Master of Arts in Teaching (MAT) degree, or its equivalent, and a strong background in the behavioral sciences. He has many skills in the affective domain. He is inclined to be idiographic, or person-oriented, and relates well to children and others with ease and confidence.

The Learning Specialist is expert in the processes of learning. He should know how to use which learning strategy for which kinds of students. He has that ability to stimulate, encourage, motivate, and has the skill to "turn kids

on." He rarely puts people on the defensive, and has personal needs that are congruent with the role of learning facilitator. He has unique skills and abilities for guiding students' learning activities and knows how and when to provide them. He recognizes common obstacles to learning and knows how to help children overcome them. He refers students with serious behavior problems, which he himself tries to understand first, to appropriate staff members, such as in pupil personnel services. He uses subject matter content as the vehicle through which children come to know and understand major environmental concepts. He adapts the learning strategy to the instructional objective, as by conducting small group discussions, individual seminars, and independent study programs. He makes effective use of educational technology, media, and other resources continuously at his and his students' disposal. He has an extensive background in professional education and liberal arts. He also has broad subject area knowledge such as in social science, natural science, or business.

Personnel in the second group are the Subject Matter Specialists (SMS). A person in this group has a Master of Science degree or its equivalent. He is expert in a given academic discipline within a broad subject matter field; for example, a broad background in the biological sciences and a special interest in zoology or botany. The SMS is inclined to be nomothetic, but has a variety of human skills that can be very helpful to children with specialized learning needs. He is skilled in planning, conducting, and reviewing curriculum research and findings. He uses this skill in cooperation with the LS to adapt existing curricula to the particular needs of the children in the school and community. The SMS keeps abreast of current developments in his field and contributes regularly to scholarly journals. He participates in professional conventions and maintains a resource bank of reference data pertinent to his subject area. He knows which tests are most effective for evaluating student progress in his subject and how to administer, score, and interpret them. He is intelligent and creative and will play a significant role in determining which concepts the students should master in his subject area. He is orderly, systematic, and methodical. He prepares learning materials for videotapes, sound tapes, independent study, learning activity packages, laboratory workbooks, and other instructional aids. He gives lectures to large groups, works with PTA, curriculum study committees, acts as liaison person to universities, conventions, and other schools and serves as a learning resource to children and other teachers.

There is and should be much cognition for the Learning Specialist and there should be love of development of subject as well as cognition on the part of the Subject Matter Specialist. The really essential difference between the two is that the Learning Specialist has a developed competency in teacher-learner relationships, while the Subject Matter Specialist has special abilities for keeping

up with growth and development of a subject area.

It is possible that many of the qualities of both the LS and SMS are confined in one person. An individual with these combined attributes is said to be "transactional." He would tend to behave in ways that stress goal fulfillment and at the same time provide for individual need fulfillment.²⁹ The transactional teacher could operate nomothetically or idiographically as the occasion required and may be referred to as an Educational Specialist.

The third group of Instructional Resource Specialists is the Instructional Communications Specialists (ICS). Persons in this group have a minimum of a Bachelor's degree and have a strong background in educational media and technology. The Instructional Communications Specialist knows how to plan, execute, and evaluate programs suitable for educational television, instructional television, and similar televised learning activities. He is skilled in the operation of computer-assisted instruction and knows how to program learning materials for use on a computer. He understands the intricacies of photography, cinematography and the graphic arts; and, more important, he can suggest ways to utilize these media to improve learning opportunities for students. He understands communications theory and maintains a resource file on available audio-visual materials and equipment. He is skilled in library science and can design and operate such facilities as learning resource centers, instructional materials centers, and professional libraries. He knows how to operate, maintain, and repair projectors, recorders, phonographs, microfilm readers, and similar equipment. He enjoys helping children, but prefers spending an hour troubleshooting a faulty television set rather than working directly with children.

The Learning Technician (LT) has the minimum of an Associate in Arts degree, with background in clerical work, educational technology, and education. This person can type, take some dictation, and knows how to do the routine clerical tasks related to classroom management and operation such as taking attendance, collecting money for yearbooks, and general housekeeping. The Learning Technician works closely with Learning Specialists and enjoys being with the teen-aged students. He helps them identify learning resources, set up media equipment, do research, and independent study. He is never too busy to stop and chat, but has the capacity to be firm so that many students may receive individual help.

²⁹Robert P. Moser, "The Leadership Patterns of School Superintendents and School Principals," Administrator's Notebook (Vol. 6, September, 1957).

These four groups, the Learning Specialists, the Subject Matter Specialists, the Instructional Communications Specialists, and the Learning Technicians, work in an interdependent relationship to implement the instructional program. When he is available, the Educational Specialist could be a substitute, supplement, or complement for the LS and SMS. Which he would be would depend upon the needs of the students and the type of other staff available. The extent of the interdependent relationship is shown schematically in Figure 18.

Note that in Figure 18 the Subject Matter Specialists have clerk-typists to help with routine office matters. The Instructional Communication Specialists also have the clerical and technical assistance of an Instructional Communications Aide. Using guidelines proposed by McKenna,³⁰ it is suggested that:

1. One full-time clerk-typist be made available for every two Subject Matter Specialists
2. One full-time Instructional Communications Aide for every 600 students
3. One Learning Technician to work with Learning Specialists for every 200 students

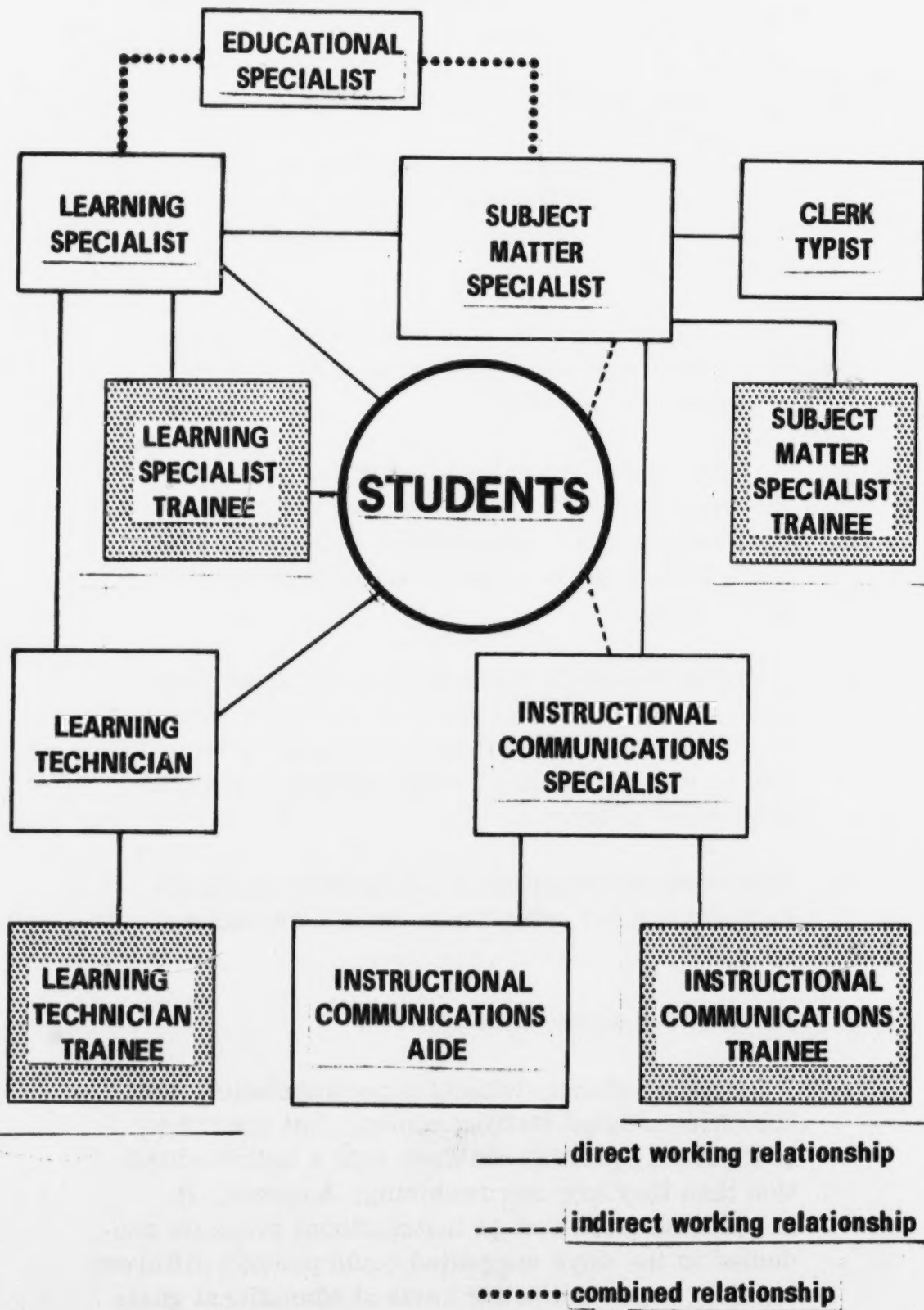
It is suggested that Instructional Resource Specialists be made available in the following ratios:

4. Learning Specialists, 30 per 1000 students
5. Subject Matter Specialists, 1 per 1500 students for each of the following subjects:

Art
Business Education
English
Foreign Languages
Health and Physical Education
Home Economics
Industrial Arts
Mathematics

³⁰Bernard McKenna, Staffing the Schools (New York: Teachers College, Columbia University, Bureau of Publications, 1965).

Figure 18 – Suggested Differentiated Staffing Pattern for Resource Personnel



Music
Science
Social Science

6. Instructional Communications Specialists, 3 per 1000 students

The potential benefits of this differentiated staffing model include:

1. An increased emphasis on learning as a behavioral change process requiring planned interaction between and among students and educational personnel
2. An increased emphasis on the interdependency of a school staff to provide meaningful learning experiences for children
3. An opportunity for school personnel to function in educational roles that allow the satisfaction of individual need-dispositions while simultaneously fulfilling the expectations of their institutional roles
4. A diminution of the vertical teaching team hierarchy concept of differentiated staffing without sacrificing the recognition of uniquely individual human and professional contributions to the improvement of learning
5. Increased participation in preservice education to make teacher education a more continuous process

Some of the limitations of the model include:

1. It cannot be shown, without experimentation, that the differentiated staffing concept just described will actually provide children with a better education than they are now receiving; however, it may be expected that an instructional program conducted in the ways suggested could provide different learning experiences for revised educational goals

2. It will require extensive continuing education programs to orient staffs to the concept
3. Its continuation will depend upon major revisions in existing preservice programs
4. There may be inadequate resources to test the effectiveness of the model over a long period of time

Section 3. A Suggested Theoretical Model for Secondary School Preservice Education

The goal of preservice education is to prepare the professional education personnel necessary to articulate the goals of the secondary school. The following assumptions were made:

1. The differentiated staffing suggested in the previous section is a valid concept for meeting the goals of the comprehensive secondary school.
2. The Instructional Resource Specialists described earlier, that is the Learning Specialists, Subject Matter Specialists, the Educational Specialists, and Instructional Communications Specialists can be held accountable and responsible for the learning activities of children provided through the instructional program.
3. Preservice education should concentrate on developing the cognitive knowledge and affective behavior.
4. Facilitating the process of learning is both an art and a science; therefore, educational personnel responsible for that process should be prepared as artisans and as scientists.
5. Only certain types of people can contribute constructively to the education of children by virtue of particular knowledge and behaviors they already

possess, and by those they can acquire.

6. Every trainee is different and therefore requires individualized preservice learning activities to help him acquire the necessary knowledge and behavior he will need as an educational resource person.
7. Just because someone loves children and enjoys working with them does not mean he has to be a teacher.
8. Just because someone does not love children or does not enjoy working with them does not mean that he cannot make some contribution to their education.

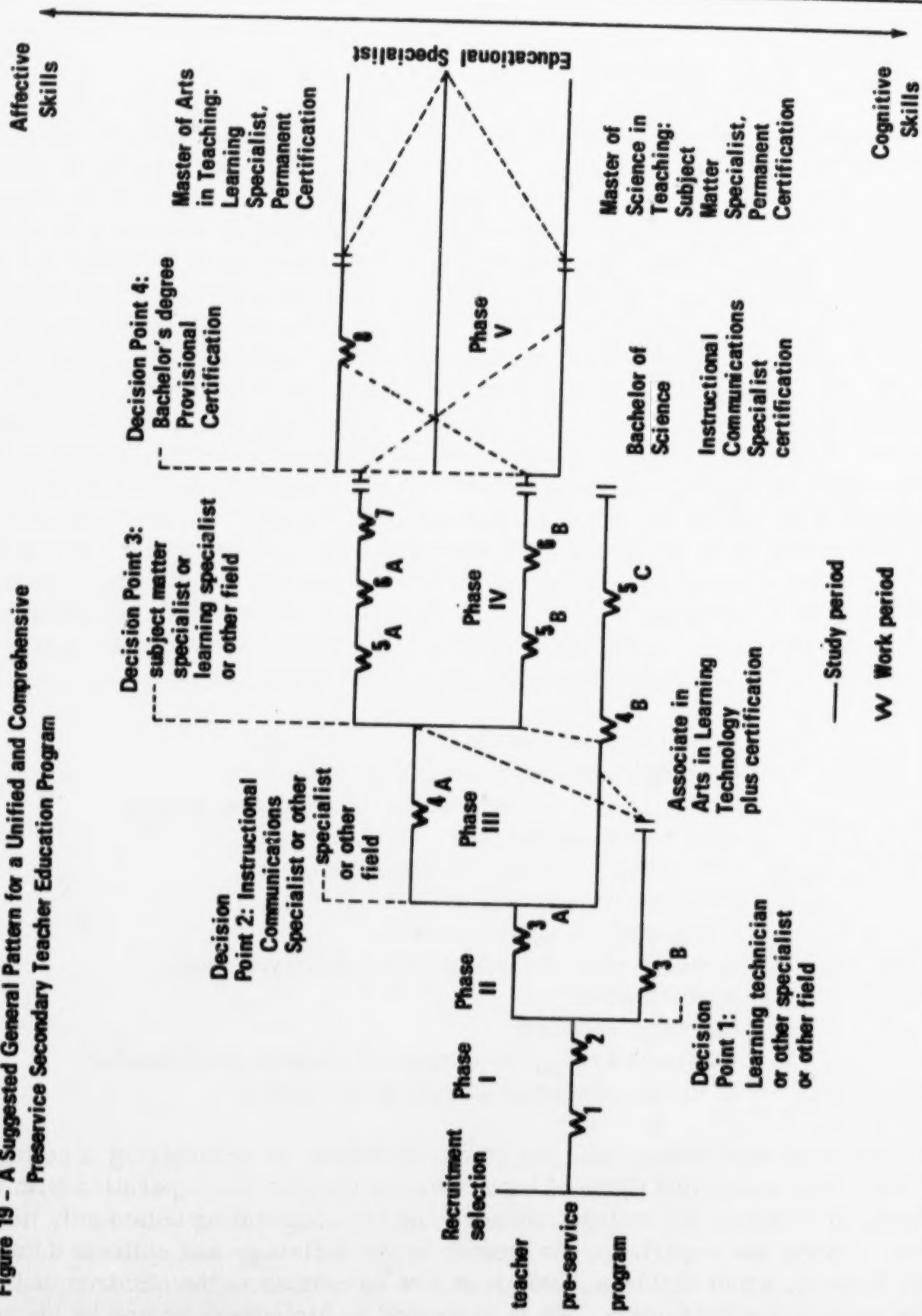
A Preservice Sequence

Preservice education programs need to be established to prepare each kind of Instructional Resource Specialist: Learning Specialists (LS), Subject Matter Specialists (SMS), Educational Specialists, Instructional Communications Specialists (ICS), and Learning Technicians (LT). The preparation programs for these persons should reflect consideration for the ten criteria listed near the beginning of this chapter. A suggested general pattern for a comprehensive preservice secondary education is outlined in Figure 19 on the following page.

The trainee begins his preservice education program after being graduated from an accredited high school. He may start his program in the summer immediately following graduation, or in the fall of that year.

The program is divided into five phases. Each phase is characterized by a period of study followed by a period of work experience. The work experiences are intended to serve as guideposts in the development of educational skills and as opportunities for evaluating their growth. As each work experience is anticipated and completed, the trainee will be in a better position to decide whether becoming a teacher arises from a genuine commitment to the profession or a caprice ventured into for other reasons. Each study period is designed to prepare the trainee for the work experience ahead while helping him to adjust his knowledge and skills according to evaluations of his previous

Figure 19 - A Suggested General Pattern for a Unified and Comprehensive Preservice Secondary Teacher Education Program



work experience.

Phase I

All trainees begin a common program in Phase I regardless of which kind of Specialist they wish to become. Phase I starts with a sixteen-week period of liberal arts study. It includes learning experiences dealing with the natural and social sciences, language arts, and the humanities. The trainee is also oriented to his first work experience (W_1). This experience could last for as much as eight weeks. It would be designed for three purposes: (1) to bring the trainee in contact with children, (2) to offer experiences with children in a range of ages, and (3) to occur outside of a school setting. The trainee is brought into contact with a wide age range of children so that he may decide if this is a relationship he wishes to continue, and if it is, which age group he prefers. The point of not having this work experience occur in a school is to determine if the trainee can be a benefit to children, not if he should be a teacher. If he can be a benefit, he may find that his contribution to the growth of children may be more effective in ways other than as a teacher. The next work experience would help determine if the trainee has potential for benefiting children in an educational context. This first experience may be as volunteer or for pay and could be accomplished by working in any situation that meets these three criteria. Some suggested work experiences are:

1. Juvenile court liaison
2. Children's hospital orderly or aide
3. Young Men's, or Women's Christian Association supervisor assistant
4. Playground assistant to supervisor
5. Orphanage assistant
6. Child welfare agency worker
7. Group leader at institution for deprived teen-aged children
8. Nursery assistant
9. Outreach worker to encourage teenage participation in group activities at recreation agency

This work experience, like the others to follow, is arranged by a college official. The nature and place of experience is decided in cooperation with the student, or trainee, his college advisor, and the cooperating community institution. During the experience the trainee works full-time and collects data about himself, about children, and about how he relates to the children and staff in the cooperating institution. He is evaluated by his superiors and by his advisor who visits him regularly. These data are reviewed by the trainee and his

advisor so that a study schedule can be established as a follow-up to the initial work experience.

The second study period is preparatory to a second work experience. It adds to the trainees' cognitive liberal arts skills. This period also begins to develop those affective skills, attitudes and values, and observable normative behaviors which may be helpful to the student in consideration of the human interaction data collected during the first work experience. A second work experience (W_2) is arranged as before and preparation for it is completed. The second work experience may again be voluntary or for pay and should be selected (1) to bring the Specialist trainee in close contact with children, (2) to offer opportunities for working with children in a relatively narrow age range and (3) to offer many instructional opportunities for the Specialist trainee. Some suggestions for the second eight-week work experience are:

1. Boy or Girl Scout assistant leader
2. Campfire Girl assistant
3. Den mother
4. Day care center helper
5. Campcraft director at Summer Camp
6. Aquatics instructor at a camp
7. Pediatric aide
8. Instructor for unwed mothers

As before, and in all other work experiences, the nature and kind of work are determined by a cooperative agreement between the student, the community agency, and the college advisor. Feedback evaluation data is again used to correct and develop the trainees' skills and abilities necessary for interacting successfully with children and adults. Some time near the end of the second work experience (or sooner), it may be found that the trainee has become disenchanted with children, or that he enjoys being with and helping children, but not as a "steady diet," or that he enjoys working to help children very much and that the children seem to enjoy him, too. It is at Decision Point₁, approximately thirteen months after his program began, that the trainee has the following options:

1. Drop out of the preservice education program entirely and enter a different field. The liberal arts work taken to date has not detracted from the normal pursuit of a different course of study.
2. Begin Phase II to become certificated as a Learning Technician.

3. Begin Phase II to become certificated as some other Instructional Resource Specialist.

Phase II

If it is decided that the student intends to become certificated as a Learning Technician (LT), he will need to complete an additional study-work-study sequence. This decision will depend upon the student's desires, his abilities, and the results of conferences and discussions with his college advisor.

The Learning Technician's third study period could require about four months. It will include training in communications technology and media use, the use of office machines and duplicating equipment, including how to type and how to function as an instructional aide. This will be preparatory to a third work experience (W_{3B}). Some specific skills that could be developed during this study period could include how:

1. to tutor high school students
2. to help high school students do independent study
3. to set up and operate audiovisual equipment
4. to help teachers with students who become emotionally upset
5. to set up laboratory equipment
6. to supervise field trips, cafeterias, and other school areas
7. to record grades
8. to take attendance
9. to give first aid
10. to set up and maintain a simple bookkeeping system

Training will be given in basic understandings of child behavior. It will include study in human growth and development with emphasis on the adolescent years.

The Learning Technician Trainee's third work experience will be in a secondary school. At first he will work closely with a certificated Learning Technician. After approximately two weeks the trainee may be given responsibility for working directly with a Learning Specialist and assuming a total Learning Technician role. Regular visits by the college supervisor will continue. At the end of approximately five weeks the Learning Technician Trainee work experience period will be completed and evaluated as before. The final study period will begin with follow-up skill development, additional training in professional education and understanding child behavior and in the liberal arts. An Associate in Arts degree in Learning Technology will be awarded approxi-

mately five months after his third work experience and after approximately twenty months of study and work. Certification and job placement is arranged by the institution. The criteria for placement include provision for continuing education and follow-up activities such as providing feedback to the graduating institution from both the employing school district and the Learning Technician.

If the student intends to become a Learning Specialist, Subject Matter Specialist, or Instructional Communications Specialist, he will be required to complete continuing alternate periods of study and work. The first Phase II study period for these Specialists shares similar learning experiences with the parallel Learning Technicians' study period. However, certain different skills need to be developed in preparation for the work experience to follow (W3A). The Instructional Resource Specialist trainee studies communications theories and communications technology, including the uses of media. Liberal arts and professional education, such as understanding child behavior and human growth and development with emphasis on the adolescent years, and opportunities to analyze the various roles and responsibilities of all educational personnel are additional learning opportunities provided.

The third work experience will combine some of the opportunities given the Learning Technician trainee, plus orient the Instructional Resource Specialist trainee to the roles and functions of the Learning Specialist, Subject Matter Specialist, and Instructional Communications Specialist.

This work experience will be in a secondary school and can consist of three consecutive two-week periods. The first two-week period will be devoted to working closely with a Learning Specialist. He will learn the role and functions of the Learning Specialist and the Learning Technician. He will observe how the Learning Specialist interacts with the other Specialist personnel and with the Support Services personnel. He may be given some instructional responsibility, or technical responsibility as a Learning Specialist trainee and as a Learning Technician trainee. The second two-week period will provide opportunities for learning the role and functions of the Subject Matter Specialist. The trainee will observe how the Subject Matter Specialist interacts with the other members of the school staff. He may be given some curriculum responsibility as a Subject Matter Specialist. During the third two-week period, the trainee will observe how the Instructional Communications Specialist interacts with the other school personnel. He will work closely with the Instructional Communications Specialist so that he may understand better his role and functions and those of the Instructional Communications Specialist aide. The Instructional Communications Specialist aide is a high school graduate with interest in children and a desire and ability to do the necessary clerical work and provide technical assistance to the Instructional Communications Specialist.

The Instructional Communications Specialist trainee will also spend some time with Support Services staff, such as those in Pupil Personnel or the Administrative Services.

After the third work experience is completed and evaluation data are gathered and analyzed, the Instructional Resource Specialist trainee arrives at Decision Point 2. At this point he may, upon recommendation from his college advisor, after analyzing attitudes developed during the first three work experiences, and after reflecting upon his own sense of commitment, desire, and ability, elect any of four alternative choices:

1. Drop out of the Instructional Resource Specialist preservice program and reenroll in the Learning Technician program
2. Drop out of the Instructional Resource Specialist preservice program and enter a different, but perhaps related field such as a Support Services person
3. Begin Phase III to become certificated as an Instructional Communications Specialist
4. Begin Phase III to become certificated as a Learning or Subject Matter Specialist

Phase III

If the trainee opts to become a Support Services person he may enter whatever preservice program is necessary to accomplish that end; it is hoped he can do this without serious loss of investments in time, study, or work. If he decides to become an Instructional Communications Specialist, his initial study period beginning in Phase III is similar to the terminal study program for the Learning Technician; that is, liberal arts, educational technology, and child behavior and human growth and development. The Instructional Communications Specialist trainee also selects a media specialty, such as programming instructional materials for computer application, library science, electronics, including radio and television maintenance, or television and motion picture production for instructional use.

The Instructional Communications Specialist trainee also prepares for and orients himself to his fourth work experience (W_{4B}). This work experience will be devoted to a communications-related commercial, industrial, or business

enterprise. It may include opportunities to work in such places as:

1. Educational television studio
2. Public library assistant
3. Motion picture studio
4. Microfilm production studio
5. Photography studio
6. Recording studio
7. Electronic equipment repair shop
8. Computer programming corporation

The fourth work experience is followed by an evaluation and the planning and development of a study program designed to strengthen various skills. Study is pursued along three major lines: communications technology, liberal arts, and professional education. The latter area will include careful study of the relationships between theories of learning and instruction and the use of media as a means to facilitate changes in childrens' behavior. The student will also learn how to repair and maintain equipment and how to evaluate and select the "hardware" necessary for implementing the instructional program. Study is also undertaken as preparatory to his fifth (and final) work experience (W_{5C}).

The fifth work experience for the Instructional Communications Specialist will be as an Instructional Communications Trainee. He will work closely with an experienced Instructional Communications Specialist—probably not the same person or school he worked with nearly a year before. This work experience would acclimate the trainee to his future role and help him to learn, through guided experiences, some of the potential pitfalls, intricacies, and helpful techniques related to it.

If, at Decision Point 2, the trainee makes the decision to become a Learning Specialist or Subject Matter Specialist, he continues his program as (1) follow-up to his third work experience, (2) expansion of cognitive knowledges, (3) the continuing development of affective skills, attitudes and values, and observable normative behaviors, and (4) preparation for the fourth work experience. A broad subject area of study is also decided upon, such as social science, natural science, mathematics, foreign language, or language arts. Course work in the selected subject area is pursued in conjunction with professional education and liberal arts studies. Taken together, these three areas constitute the cognitive knowledge expansion mentioned above. Additional learning opportunities are provided, both formally and informally, to familiarize the trainee with his next work experience.

The fourth work experience will be placement in an industrial, commercial,

or business setting (W_{4A}). There will be no special contact with children or instruction, except as may naturally occur by virtue of the position. The purpose of this work experience is to give the trainee an opportunity to become involved in the process of how people earn their livings in the field he has selected. This could help him understand how persons in his field contribute to our economy and culture. It could also help him to see his area of concentration as something more than an object of academic pursuit. Trainees in the social sciences may work:

1. on a political campaign for a candidate for public office
2. as an assistant for a research project as in sociology or anthropology
3. in a law office of municipal agency
4. as a runner on the Stock Exchange

Trainees in the natural sciences may work:

1. in a laboratory or observatory
2. as a field assistant as in an ecology research program
3. in a zoo or botanical garden
4. as an assistant in a public health agency

Trainees in mathematics may work:

1. for a statistical survey organization
2. as an engineering assistant
3. in a computer design agency
4. as an assistant to an actuary, or in an insurance company

Trainees in foreign language may work:

1. for an import-export company
2. as a guide at an international exhibit or fair
3. as an interpreter
4. as a translator

Trainees in the language arts may work:

1. as an entertainer or actor

2. on a newspaper
3. for an advertising agency
4. as a writer for radio or television

These are simply examples in five different fields. Many more employment opportunities exist. The most important consideration is to have the trainee become familiar, on a first-hand basis, with the "outside world," and to come to know more intimately the nature and ramifications of some occupation in his chosen field. Evaluation of the work experience is conducted by the college supervisor, the cooperating institution, and the trainee. The evaluation data are again used, as before, to help develop necessary skills and to identify those areas requiring strengthening or modification.

The four work experiences and their evaluation process are also reviewed and progress is analyzed. Study continues in the three areas of cognitive knowledge and learning opportunities continue to be made available for the development of affective qualities. Somewhere near the end of the second sixteen-week Phase III study period the trainee, with his college advisor, reviews his academic, social, psychological, and emotional growth to date. A decision is made to determine which future educational role would allow the trainee to make his most effective contribution to children's learning experiences. This contribution could be made either as a Subject Matter Specialist or as a Learning Specialist. If a decision is made in favor of the former, the alternating study-work-study program continues with an emphasis on cognitive development. If it is decided that the direction should be towards the Learning Specialist, then the study-work-study sequence will emphasize affective skills development. An alternative choice would be to leave the preservice program to pursue a related field.

Phase IV

Two more work experiences follow for those intending to become Subject Matter Specialists. The first will be an independent program in which the trainee will select a purposeful eight-week period of meaningful activity. This fifth work experience (W_{5B}) can include travel, work, or continued study. Whatever activity or combination of activities is decided upon, selection should consider the following suggested criteria:

1. To what extent would the activity help the trainee to understand better how he can make constructive contributions to the education of children?
2. To what extent would the activity contribute to the

trainee's understanding of himself and his relationships to others?

3. To what extent would the activity contribute to the trainee's ability to fulfill his unique role as a Specialist and as a human resource person for children?

The same kinds of criteria are appropriate for the Learning Specialist Trainee's fifth work experience (W_{5A}). For the Subject Matter Specialist, the independent work experience may involve more cognitive than affective skills, and be generally nonperson directed. For example, he could work in a curriculum laboratory and make instructional materials, help write research reports and articles, serve as a research assistant on some scientific project, or work with an educational consultant in an architectural firm that designs schools. He could visit schools in and around the state, observe other teachers working with children, or try working with children himself in a new setting. The Learning Specialist, on the other hand, may select more person-directed activities; for example, counselling emotionally disturbed children, activities director at a camp, or assisting on a children's theater production.

The sixth, and final, work experience for the Subject Matter Specialist trainee brings him back into the school setting as a Subject Matter Specialist Trainee (W_{6B}). In the school he will work with an experienced Subject Matter Specialist, with other members of the school staff, and will learn the intricacies of his role. He is given guided opportunities to test his skills and abilities. His performance as a Subject Matter Specialist Trainee is evaluated by his sponsor or cooperating Subject Matter Specialist, by others with whom he works in the school, by his college supervisor, and by himself. He may be given complete role responsibility while his sponsor Subject Matter Specialist participates in some continuing education activity or during other periods.

During Phase IV, and before being provisionally certified as a Subject Matter Specialist, the trainee studies the interdisciplinary relationships between the liberal arts, professional education, and the specialized area of his content field. For example, if the trainee's selected specialty is in social science, he may explore the interrelationships of American history in the contexts of the liberal arts and professional education. American history may be studied not as a chronological series of dates, persons, and events, but rather as a sequence of social responses to a changing culture and how those responses affected further cultural change. To do this effectively, trainees need to understand American social contexts in the arts, the sciences, and in its institutions, not the least of which was the school. The point is that the Subject Matter

Specialist should be trained to grasp his subject as more than an entity worthy of academic pursuit, but as a part of a larger system of learning which transcends all subject matter.

The Learning Specialist has a "subject area" too—it is behavioral science and the study of theories of learning and strategies of instruction. It includes the development of understanding how behavioral changes occur, of attitude and value development, of learning how to learn, how to cope, and, most importantly, to develop continually those attributes in self which maximize the facilitation of learning in children and in others. The Learning Specialist trainee's sixth work experience (W_{6A}) is designed to give him a broad perspective in education and learning. It could require distant travel through work with agencies such as UNESCO or UNICEF or even the World Health Organization. This eight-week period may be spent assisting professional personnel in a state department of education, in the U.S. Office of Education, or in a broad spectrum research agency such as the Research Division of the National Education Association or the Educational Research Council of America. It could also involve staff participation in professional organizations such as the Ohio Education Association, the National Education Association, or a related group.

The Learning Specialist trainee's seventh work experience (W₇) is the last one he will have before being provisionally certified. This work experience will be as a Learning Specialist Trainee in a secondary school. He will work for a period of eight weeks under the guidance and direction of an experienced Learning Specialist. He will learn how to help Learning Technician trainees and how to work with other Instructional Resource Specialists and Support Services personnel. He will learn through observation and through first-hand experience how to assume and fulfill the Learning Specialist Role. As confidence develops, and as skills improve, more direct instructional responsibilities devolve to the Learning Specialist Trainee. His performance is evaluated by his sponsor and by the others with whom he works in the school, by his college supervisor, and by himself. Longer child interaction opportunities occur when the sponsor Learning Specialist leaves the school setting temporarily to participate in continuing education activities. Other periods are made available to the trainee to test and experiment with his skills and abilities.

During Phase IV the Learning Specialist studies liberal arts, behavioral science—such as group dynamics, leadership theory and interpersonal behavior, and professional education. The context of professional education study during Phase IV is dependent upon the kinds of work experiences the trainee has had. It will be a combination of learning activities designed to develop understandings of the causes of child behavior, including how children are motivated, how to recognize when they are encountering obstacles to learning, and how to respond

constructively to their learning needs. The trainee also learns how to utilize the contributions of other school staffs to facilitate learning in children. He develops self awareness through human laboratory experiences and learns how to use himself as a learning resource for children.

Phase V

After the Bachelor's degree is awarded, the Subject Matter Specialist and Learning Specialist begin Phase V. This will be an intensive Master's degree program. The Subject Matter Specialist pursues studies in his selected specialized field. He will learn how to conduct and evaluate research in his broad subject area so that the findings of such research may be translated into learning activities for secondary school students. The Subject Matter Specialist trainee is now a Subject Matter Specialist Candidate. He learns how to utilize his technical, cognitive, and other skills to create learning materials for children. He studies the proceedings of the professional organizations in his field and learns which sources are available for the development of curriculum materials and activities. The Subject Matter Specialist Candidate learns how to evaluate pupil growth, how to select, administer, score, and interpret the results of standardized tests related to his field, and how to construct objective student evaluation instruments. He learns how to evaluate and select learning tools and aides concerning his subject area; for example, maps and audiotapes, and other "software." This ten-month Master of Science in Teaching program culminates with job placement in a secondary school and permanent certification as a Subject Matter Specialist.

The Learning Specialist Candidate, after being awarded the Bachelor of Arts degree, begins study toward a Master of Arts in Teaching. This program is characterized by a mid-program modified internship. This means that the candidate first engages in a study period, then a modified internship, and then a second study period. The first study period in this sequence is designed to acquaint the candidate with laboratory and with practical approaches to learning; that is, simulated and actual learning experiences. Game theory, micro-techniques through the use of videotaping, and the use of learning materials in connection with these exercises are studied. Candidates may design learning experiences for themselves and are guided in the creation of them. The purpose is to give the trainee opportunities for applying the principles of how one learns. For example, the candidate may design a learning activity for himself to help him become more proficient at recognizing children's learning disabilities. He could outline the kinds of learning experiences he believes he needs in order to do this. He may develop a schedule of school each week for three weeks. Each visitation could include classroom observation for an hour or more. He may use a checklist, developed earlier, in con-

junction with other data gathering instruments such as audiotapes and interview schedules. During each visitation the candidate would identify, for the teachers whose classes are being observed, those students who evidence learning disabilities. These identifications could be verified so that the candidate is given feedback concerning the accuracy of his diagnoses. The major thrust during this first study period is to have the candidate understand better how different levels of experience—vicarious to first-hand—affect his own learning.

The modified internship (W₈) is a period of experimentation as well as growth. The candidate is given a terminal instructional position in a setting unfamiliar to him. It could be in an urban or suburban ghetto. It could be in a private or parochial school, or even in an experimental Free School or Summer-hill type school. It could involve experience with exceptional children, such as the physically handicapped, emotionally disturbed, or educable mentally retarded. The purpose is to help the candidate become aware of and gain experience with alternative modes of education, not so that he may work to undermine or destroy these modes, but so that he may better understand that children learn in a variety of settings and in a variety of ways.

The last study period for the Learning Specialist Candidate provides interdisciplinary learning opportunities in the liberal arts, subject matter content, and in the behavioral sciences. He learns how to utilize effectively the skills and contributions of other school staff members. He pursues courses side-by-side with Subject Matter Specialist Candidates and works cooperatively with them in the development and articulation of learning activities. Job placement and working toward the Master's degree begins the continuing education phase of his education.

Some trainees can be equally proficient in developing their cognitive and affective skills. Some of these persons may have ambivalent feelings about whether they should be Learning Specialists, Subject Matter Specialists, or some other form of instructional personnel. These persons have at least four options. First, they may delay their decision entirely until they feel more sure about the direction they wish to take. Second, they may follow either the Learning Specialist or Subject Matter Specialist sequence and pursue Master's degree work towards the Educational Specialist role. Third, they may follow either sequence and pursue post-Master's degree work toward the Educational Specialist role; or fourth, they may work with their college advisor to plan a course of study that combines portions of both sequences according to the needs of the student. Persons who pursue development as an Educational Specialist would be unique. Their program could be called transactional.

Summary

The preservice programs just described are suggested as outlines of ways to prepare five kinds of Instructional Resource Specialists: Learning Technicians, Instructional Communications Specialists, Subject Matter Specialists, and Learning Specialists. For certain individuals it could involve preparation for the Educational Specialist role. The program for the Learning Technician consists of approximately fifteen months of study and five months of related work experiences. The alternate periods of study and work are designed to supplement and complement each other and terminate with an Associate in Arts degree in Learning Technology after the equivalent of about two years of college work.

The program for the Instructional Communication Specialist is equivalent to the four-year Bachelor's degree, except that it may be completed in forty consecutive months of alternate periods of study and related work instead of four academic years. The preservice program for Subject Matter Specialists and Learning Specialists includes the forty consecutive months Bachelor's degree and continues for an additional ten months leading to a Master's degree.

Another important aspect of this preservice program is that it prepares professional education personnel for continuing education and for specialized certification for a differentiated staffing position.

Some advantages of this preservice secondary teacher education program include:

1. Early opportunities for planned interaction with children so that intelligent and constructive career decisions may be made
2. Several opportunities for trainees to reenroll in a different preparation program without serious loss of college credit or time investment
3. Individualization of the program to the extent that it is developed with consideration for the results of work experience evaluation data gathered by the trainee, his college supervisor, and his community sponsor
4. A shorter investment in time for the student: a Master's degree within fifty months, or slightly

more than four years; a Bachelor's degree after forty months, or about three and one-third years instead of the usual four academic years

5. A varied setting for the different work experiences, encouraging more cooperation between schools, the state department of education, community and municipal agencies, businesses and other civic and cultural institutions, and the preparing colleges and universities
6. Constant enrollments for the duration of the preservice program, affording more opportunities for year 'round use of institution facilities
7. Ability of trainees to be prepared to assume differentiated staff assignments that simultaneously recognize their ability to make significant contributions to the learning opportunities of children while providing means for personal as well as professional growth
8. Recognition that the role of the school is becoming increasingly complex and that specialists are necessary to provide the kinds of learning experiences children need
9. Trainees have an opportunity to earn money during their preparation program
10. Trainees have an opportunity to plan their own preservice program

Other advantages, such as more college staff-community interaction and the recognition that teacher preparation may no longer be the sole responsibility of a single institution or a single department or division, may also be identified. The model includes some limitations too which should be noted:

1. Potential trainees may be "scared off" by a program requiring early interaction with children and subsequent performance evaluations.
2. College and university structures may find implementation difficult because of staffing and facilities limitations.

3. The administration and staffing of such pre-service programs may require finances and other resources currently unavailable.
4. Schools may not regard the concepts as appropriate for the kinds of staff now available; this could mean extensive investment in continuing education and restructuring.
5. The availability of community businesses and other cooperating work agencies may be limited; this could require the enlistment of cooperating agencies from several states or even from other countries.

Section 4. A Suggested Model for Continuing Education

The major goal of continuing education is to improve the learning opportunities for children. The achievement of this goal rests on several assumptions, including:

1. Children's learning programs will require improvement and change as long as the goals and purposes of those programs continue to change in a positive direction.
2. What happens in the classroom can be changed by changing the behavior of the teacher.
3. In-service teachers' skills can be improved through planned continuing education programs.
4. Early teacher involvement helps to establish closer identification with, and commitment to, the goals and purposes of continuing education programs.
5. The most effective programs in continuing education are those which
 - (a) tend to meet the needs of the teachers as well as the students

- (b) have realistic objectives in terms of expected behavioral changes
- (c) are carefully planned and executed
- (d) provide numerous opportunities for active participation rather than passive observation
- (e) have useful and constructive mechanisms for evaluation and feedback

The major findings of the Teacher Education Assessment Survey suggested that the above assumptions, in addition to the implications reported earlier in Chapter V, may be valid starting points for a cooperative continuing education model.

It is proposed that a system of twelve Regional Continuing Education Agencies (RCEA's) be identified. Each RCEA would be selected according to criteria such as geographic location, accessibility by automobile or by air, research and other resources such as facilities, staff and materials, and desire to participate in the system. Some suggested locations for RCEA's are: Akron, Athens, Cambridge, Cincinnati, Cleveland, Columbus, Dayton, Defiance, Lima, Stuebenville, Toledo, and Youngstown. Institutions to serve as agencies could include colleges and universities, county superintendent offices, educational research organizations, and the school districts themselves.

It is suggested that each RCEA poll a sample of school districts in its region for the following purposes:

1. To determine what major educational problems, issues, and concerns are currently facing those districts
2. To determine the nature of these problems; that is, how these problems are being reflected in the daily operation of those districts
3. To identify the significant factors contributing to the existence of these problems in the districts
4. To give the school districts an opportunity to consider the nature and scope of these problems

so that they may become more aware of them

5. To give these school districts an opportunity to develop alternative solutions to these problems by suggesting programs in continuing education
6. To help these school districts and the RCEA to function cooperatively in an attempt to improve education through the development of significant and meaningful programs in continuing teacher education

Each RCEA would develop a summary report of the results of its findings. This report would include:

1. A description of the purposes and procedures used to gather the data from the districts
2. A summary of the findings, including the frequencies of problems encountered, the approximate number of students affected, and how the local school districts have attempted to resolve these problems through continuing education in the past
3. A suggested priority listing of existing problems; that is, an enumeration of the major problems facing the regional sample school districts listed according to their perceived importance by the RCEA and the districts
4. Review of available resources

The RCEA reports would then be submitted to the State Department of Education for review by a group or committee organized:

1. to prepare a composite report identifying the major problems, issues, and concerns facing each region in the state
2. to establish a priority listing of problems that need to be resolved immediately, in the near future, and within the next three years

3. to identify those programs with the greatest potential for resolving those problems having highest priority
4. to make explicit recommendations to the State Board of Education with regard to priorities

This committee, for present purposes referred to as the State Continuing Education Advisory Committee (SCEAC), could comprise fifteen persons not affiliated directly with any RCEA. These persons will represent the State Department of Education, and may include several members from colleges and universities, schools, boards of education, business and industry, and others concerned with the improvement of education in the state. The SCEAC Report would be presented to the State Department of Education for review. The State Department would then approve the recommendations of the SCEAC who would in turn report back to the RCEA's concerning priorities, resources, and suggestions. The RCEA's would then disseminate this information to the school districts in their respective regions so that programs in the approved areas may be developed. These programs would be developed by the school districts and prepared as proposals for continuing education. These proposals would be submitted to the RCEA.

Each RCEA would be invited by the State Department of Education to submit proposals for continuing teacher education programs designed to resolve or significantly reduce the effects of the identified regional educational problems. These proposals would be developed by personnel in the school districts. The RCEA's would assist in the development of these proposals by offering consultant planning help, by identifying resources in area colleges and universities, educational research groups, and other community resources, and by helping schools in the region to avoid duplication of effort. The RCEAs could assist with the execution of the local programs and with the evaluation of them. These evaluations would be submitted to the State Department of Education and to the school district that sponsored the program.

Proposals submitted by the RCEAs to the State Department of Education will include descriptions of continuing teacher education programs according to the following suggested format:

- A. Names of school districts that would participate in the continuing education program
- B. Descriptive title of the program

- C. Beginning and ending dates of
of the program
- D. Estimated number of participants
- E. Estimated cost of program
- F. Names of coordinators, consultants,
and others responsible for conducting
the program
- G. Objectives of the program
- H. Descriptive outline of program activities
- I. Location of activities and facilities
- J. Agenda of meeting dates and times
- K. Special arrangements necessary, such as
released time and salary agreements
- L. Statement of estimated cost
- M. Evaluation, including procedures for
determining
 - (1) the extent to which the program
objectives were achieved
 - (2) how the program could be im-
proved; that is, personnel,
resources, facilities, cooperation,
other
 - (3) follow-up to see if children's learn-
ing opportunities have improved

The State Department would then evaluate these proposals and could award subsidies to those school districts with the most creative and potentially effective programs. These subsidies could provide for matching funds, with the State providing 50 percent of the money necessary to implement the program and the participating school districts contributing the remaining 50 percent. In

many cases several school districts could sponsor a single program. The more school districts participating, the lower would be the cost to each individual district. The coordination of these district efforts could come from the RCEAs.

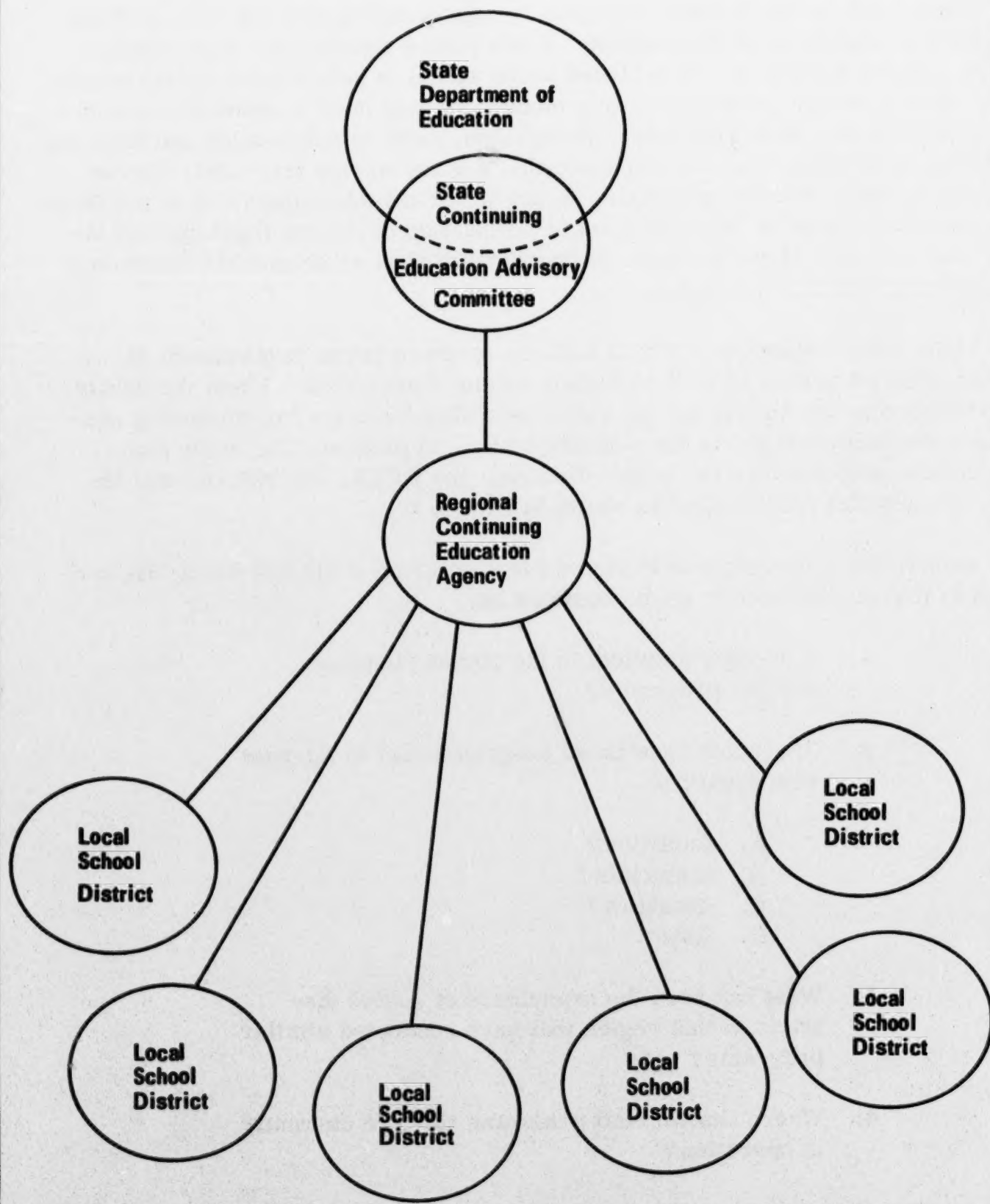
State funds could be made available by appropriating monies such as those provided by the Federal government. It has been suggested that a percentage of the Federal income tax be returned to the states to help finance public education. If this is done, portions of this money could be used to subsidize continuing education on a statewide level. State taxes, such as sales taxes and finances gathered from other sources—for example, a state income tax—could also be made available. Another possibility would be for the administrators of the State Foundation program to withhold a small percentage of the per pupil appropriation, say one-half of one percent, to be awarded when an acceptable continuing education program is identified.

Many school districts could be actively involved in the development of region-wide programs as well as locally oriented programs. From the school district standpoint, the RCEA can serve as a clearinghouse for continuing education programs that are in the planning stage, in process, or in the past. The relationship between the school district, the RCEA, the SCEAC, and the State Department of Education is shown in Figure 20.

Each district that expects to plan a local program could use the RCEA services to find out answers to such questions as:

1. Are other districts in the region planning similar programs?
2. How much have these programs cost in the past with regard to
 - A. facilities?
 - B. materials?
 - C. speakers?
 - D. time?
3. What has been the experience of school districts in this region that have conducted similar programs?
4. Where can we visit programs that are currently in operation?

**Figure 20 -- A Suggested Framework
for Coordinating Continuing
Education in Ohio**



5. What have been some activities that teachers have benefited most from ?

The kind or number of questions asked by the school district is not essential; however, the responsibility of executing continuing education should remain a local affair insofar as possible. To accomplish this end it is suggested that each school district appoint one of its full-time staff members to assume responsibility for coordinating local continuing education efforts. This person would also act as liaison between the school district and the RCEA. In larger school districts, for example those with K-12 enrollments exceeding 15,000 students, consideration should be given to the establishment of a full-time position such as Coordinator of Continuing Education. This person could be responsible to an Assistant Superintendent for Instruction and would have the following suggested major functions:

1. Cooperating with the central office administrators, building principals, and other district-wide employees in identifying needs for continuing education programs
2. Organizing and preparing materials, arranging and scheduling programs, and obtaining specialists and other resources for continuing education programs
3. Coordinating the preparation and presentation of continuing education programs with the staff concerned
4. Developing an effective system of essential records of individual continuing education activities for the district's personnel department
5. Developing continuing education programs for certificated and non-certificated staff
6. Keeping abreast of continuing education program trends and developments
7. Analyzing time involvement of participants in continuing education programs and arranging schedule for consideration of this factor when they are involved in such programs

8. Cooperate with the Regional Continuing Education Agency by serving as liaison and by keeping them informed of all local continuing education activities from planning to evaluation
9. Utilizing effectively the services, resources, and other assistance made available by the Regional Continuing Education Agency
10. Perform such other related duties as may be assigned by the Assistant Superintendent for Instruction

It is suggested that at least three factors be given serious consideration by whoever assumes the local responsibility for continuing education. First, the future program participants will be involved extensively with planning, development, and evaluation. Second, participants need to be actively engaged in the program and not be expected to play a passive role. Third, the topics selected must be meaningful to the teachers and have a clear and significant relationship to the short- and long-range improvement of classroom learning.

A frequent problem encountered in the operation of local continuing education programs has been the identification of stimulating learning activities for the participants. In many programs the typical activities are listening to lectures, viewing films and filmstrips, and participating in small group conferences. It was suggested earlier that reading and listening activities are generally not as effective as "thinking and doing" activities. It is suggested that continuing education programs should consist mostly, if not entirely of laboratory-type activities. These can include simulation exercises, games, construction tasks, role-playing, case-study analyses, and similar experiences that require active involvement. Lectures will be necessary from time to time. But even lectures could be dynamic activities for participants. For example, instead of inviting the speaker to make a single twenty-minute presentation, he might be asked to divide his lecture into four five-minute segments. The audience could be organized into a number of six or eight person groups instead of a single large group. After a lecture segment is presented, each small group could discuss what was said. This discussion could last up to ten minutes and could center on questions such as

1. What new questions have been raised as a result of what was said?

2. Are there implications in terms of improving learning based on what has been said? What are they?
3. What should we ask the speaker?
4. How do we feel about what is being said?
5. What will we be able to do better tomorrow as a result of what was said?
6. How can we use the information we are receiving?
7. Who are some other people or groups who could benefit from what is being said?
8. How does what is being said relate to material we received yesterday?
9. Do we need more information? What kind?

The output from each discussion period could be presented to the speaker and/or to the other groups. This form of feedback could help the speaker by giving him an opportunity to adapt his remarks to the needs of the teachers. It could also let him know how well he is communicating his thoughts and ideas. By sharing their output among themselves the groups could share common concerns and determine if their reactions are congruent. Two more obvious aspects of this approach are the opportunities for continuous program evaluation and the involved participation of the audience.

The following poem summarizes some aspects of this model:

Some Thoughts on the In-Service Workshop

I hesitate
to pontificate
on learning or on teaching.
It makes me pant
like a sycophant
to preach to teachers reaching
Children who
add two plus two
or two plus four or more.
I like to give

ideas that live:
that aim to change behavior.
Not just talk
with sticks of chalk
to label me a saviour.

I just can't wait
to facilitate
what happens in the classes
of boys and girls
with curls and plays
to flirt with you through glasses.
Were they to act
with all the tact
that I would wish for creatures,
the learning day
would never stay
within the bounds of teachers.

LJM

Some potential benefits of the suggested model include:

1. Opportunities for local school districts to identify significant problems, issues, and concerns requiring resolution through programs in continuing education
2. Encouragement of increased cooperation between colleges and universities, the schools, the state department of education, educational research groups, and the community
3. Encouragement of increased cooperation among school districts to solve common problems through creative and meaningful programs in continuing education
4. Reduction of duplicated efforts among school districts and among other agencies providing continuing teacher education programs

5. An opportunity for State Department of Education personnel to gain a broader perspective and better understanding of some of the major problems, issues, and concerns currently facing Ohio
6. Increased potential to stimulate the development, implementation, and evaluation of continuing teacher education in the state by making funds more readily available than they may have been in the past
7. A more coordinated approach to continuing education thereby stimulating the regional sharing of resources as well as problems

The model is not without its limitations either. These include:

1. The model emphasizes continuing education for teachers. This should not be taken to mean that continuing education programs for administrators are not necessary.
2. The time lag between problem identification and program implementation could be too long to be of value. It is hoped that this would not be greater than three or four months. This would allow at least two, and possibly three, state-subsidized continuing teacher education programs per year: fall, mid-winter, and summer.
3. The number of people involved in the implementation of the model could make effective coordination difficult.

Section 5. Recommendations and Suggestions for Further Research

The present investigation has attempted to provide some new responses to some frequent questions. It has left some questions unanswered and it has raised a few as well. The descriptions of the different models and the data presented in the TEAP may provide some new ground for further exploration. It is hoped

that these explorations will continue. The purpose of this section of the present chapter is to offer some recommendations based on this investigation and to suggest topics for further exploration and research.

1. It is recommended that planning studies be conducted to determine the feasibility of implementing the models suggested in the present chapter.

These planning studies would be necessary to determine whether or not the models can be implemented, how much they would cost, including where the money could come from, and how the models, once made operational, could be evaluated. It is suggested that when the planning research is begun for the Continuing Education Model it include the following major areas:

- A. The names, locations, and descriptions of facilities and staff of proposed Regional Continuing Education Agencies
- B. A suggested method for selecting the participating school districts, including the number of districts, their enrollment size, size of staff, and other relevant selection criteria
- C. Proposed data collection procedures for identifying major problems, concerns, and issues
- D. Description of major functions, duties, and responsibilities of the State Continuing Education Advisory Committee, including proposed criteria for membership, location, and reviewing procedures
- E. Description of financial resources, including methods of allocation and amounts
- F. Description of the organizational framework and operative relationships between each component: the local school districts, the Regional Continuing Education Agency, the colleges and universities and other educational agencies, the State Continuing Education Advisory Committee, and the State De-

partment of Education

- G. Methods of evaluation
- H. Description of estimated costs to establish each new component
- I. Estimated annual cost of operation, including costs of personnel, facilities, materials, travel, and evaluation
- J. Proposed methods of follow-up and recommendations for improvement

It is suggested that when the planning research is begun for the differentiated staffing model, it include the following major objectives:

- A. To delineate the major functions, duties and responsibilities, and general job descriptions of each Educational Resource Specialist identified in the model, including their relationships to each other and to the Support Services personnel
- B. To describe the continuing education experiences necessary to prepare a pilot staff to implement the model
- C. To identify a selected sample of schools in which the model could be tested
- D. To describe a method for evaluating the efficacy of the model (1) as a means to improve children's learning opportunities, (2) as a means to encourage cooperation and interdependent relationships among staffs, and (3) as a means for recognizing the contribution of each individual as a professional and as a human resource
- E. To prepare realistic cost estimates to establish, operate, and evaluate the results of the model experiment

- F. To prepare follow-up procedures and recommendations for improvement

It is suggested that when the planning research is begun for the preservice education model, it include the following major objectives:

- A. Description of the preservice training program goals, aims, and objectives for each instructional resource person: Learning Specialist, Subject Matter Specialist, Instructional Communications Specialist, Educational Specialist, and Learning Technician
- B. Description of the specific objectives for each study and work period outlined in the suggested preservice model
- C. Identification of institutions, cooperating school districts, and cooperating community agencies to participate in pilot preservice programs
- D. Description of each of the courses, work experiences and other planned learning activities that will be made available to trainees in each of the four preservice programs
- E. Description of evaluation procedures
- F. Description of estimated costs for establishing and implementing the model for a period of not less than six years
- G. Description of suggested follow-up procedures, including recommendations and suggestions for improvement

Preservice education is vital to the development, maintenance, and improvement of a qualified supply of professional school personnel. Although recent research has indicated an overage rather than a shortage of secondary school teachers, the kinds of teachers available are not necessarily the most appropriate ones to be responsible for articulating the learning modes and strategies suggested in the model. This is partly because most teacher training institutions in Ohio are not preparing teachers to assume specialized differ-

entiated staffing roles, and partly because many of those who are now certificated may not be inclined to be retrained to assume such a role. The new certification requirements for Ohio which will go into effect in January, 1972, might change this situation. Other reasons why the overage does not deter the need for planning research in this area include teacher dropout and related field "drop-ins."

Many teachers now among the "surplus" of certificated personnel never intend to teach. Furthermore, several colleges have volunteered that a "surprisingly large number" of male preservice enrollees have identified a convenient draft-deferment mechanism. Conversely, the establishment of a differentiated staff preparation program, such as described herein, could encourage many candidates to enter the educational field who have strong potential for making a significant contribution to the improvement of learning.

2. It is recommended that the State Department of Education help make funds available which would stimulate and encourage institutions to study the feasibility of the models suggested herein.

It is suggested that personnel in the State Department of Education encourage state officials and leaders in Ohio government enact legislation to make additional educational research funds available in the state. While it has not been specifically investigated in the present report, several sources have indicated that the current financial status of many colleges and universities in Ohio and elsewhere in America have reached critically low levels. At this writing, two of the institutions in the TEAP sample are described in a Cleveland newspaper as being in grave financial danger. The state's responsibility for education requires that financial leadership be provided. This may mean that adequate operating funds will have to precede research funds; however, without adequate and continuous research, education can be in even graver danger.

3. It is suggested that research be conducted to test the validity of the hypotheses regarding the expressed functional relationships between cognitive and affective skills in teaching.

4. It is recommended that the institutions which participated in the Teacher Education Assessment Project be given first opportunity to submit proposals to the State Department of Education to study the feasibility of the suggested models.

Schools have been under pressure to change. These pressures have come from many sources, including authoritative critics of public education, from parents, from students, and from the local taxpayers. As these pressures continue, the schools are being faced with at least the following alternatives: (1) they can continue to operate in their present form and be forced to contend with taxpayer revolts, student protests, teacher militancy, and declining public trust, (2) they can change the roles of educational personnel so that student needs may be met more easily, (3) they can change their roles as social institutions to make them more responsive to the needs of the community, or (4) they can close their doors and leave the responsibility of educating children to the home, the church, and the free school movement.

The second and third alternatives may be the most appropriate, but they are also the most difficult. There may be ways to make these alternatives easier to achieve by making good but different, use of the resources now available to the schools and by readying the necessary human resources to operate in the new roles. This would require change efforts on three frontiers. First, while curriculum and instruction is being reviewed, evaluated, and changed, teachers now in service will also have to change, supplement some existing skills, revitalize certain other skills once learned but now forgotten or discarded, and combine them into new and stimulating patterns of teaching acts that contribute to the improvement of learning. This is continuing education. Second, educational personnel have to be reorganized into a specially trained, interdependent staff who work together for the improvement of learning. This is differentiated staffing. Third, adequate numbers of people must be prepared to assume these differentiated staffing roles through new and revised patterns and programs of teacher preparation. This is preservice education.

All three of these frontiers have been surveyed. The problems now are to determine how these frontiers can be advanced, which ones should be advanced first, and how the leadership for these advances can be provided. Solutions to these problems will require a review of the goals for secondary school education in general, and for teacher education in particular. As new goals become established, priorities for action can be determined. The determination of these priorities will depend upon several factors, including: (1) the distribution

of the educational needs of Ohio's children, (2) the potential for the change to satisfy those needs, (3) the availability of funds and other resources necessary for making the changes, (4) the capabilities and needs of the institutions affected by the proposed changes, and (5) the availability and willingness of the leadership necessary for planning and coordinating the change effort.

Some priority decisions will involve emotional value-judgments. For example, some persons responsible for influencing change may favor one frontier over another simply because they like it better. Others may have a personal as well as professional interest in the success of certain phases of teacher education and feel a stronger enthusiasm. In any case, decisions will need to be made about the worthwhileness of each advancement potential; and the leadership for these decisions will ultimately devolve upon those with the responsibility for making them.

CHAPTER VII

SUMMARY

The Problem

The Teacher Education Assessment Project (TEAP) came about as a result of two beliefs held about American schools: that American teacher preparation programs are inadequate, and that the professional staffing of American schools is poorly structured. The purposes of the project were (1) to survey the current status of teacher education in Ohio, (2) to identify improved approaches and structures for providing such education, and (3) to propose alternative means for achieving it. The major objective was to prepare alternative theoretical models that could correct the situation in Ohio.

Objectives

The concept of teacher education was subcategorized into three major areas—preservice education, continuing teacher education, and differentiated staffing—and objectives were broken out for each area. The project objectives for preservice education were: (1) to establish new and more appropriate roles for instructional personnel involved in the teaching-learning system, (2) to determine procedures for preparing people for these roles, (3) to assess ways and means of assisting teachers in synthesizing subject matter, theory and practice, and (4) to suggest ways to continually update preservice teacher education.

In the area of continuing teacher education, the objectives were: (1) to determine structures of continuing teacher education programs which could maximize potentials for active improvement in small-group and individual learning situations, (2) to determine procedures or systems for integrating subject matter with appropriate theories of learning to improve the learning activities of children, (3) to identify and describe ways for increasing cooperation among teacher training institutions, schools, the State Department of Education, and research agencies, (4) to identify and describe ways in which the

best attributes of teachers may be used for the maximum benefit of children and each other, and (5) to identify and describe ways to evaluate continuing teacher education programs.

The objectives in the area of differentiated staffing were: (1) to investigate and delineate the concept of the instructional team, (2) to determine desirable characteristics and qualifications for instructional team members and identify methods for training them, (3) to examine and suggest redefined roles for members of the educational staff, and (4) to identify and describe ways to evaluate alternative staffing structures.

Procedures

The project was conducted in five phases: (1) acquisition of staff, advisors, and consultants, (2) project organization, and accumulation of research documents and literature, (3) extensive search of documentation, identification of sample, development of instrumentation, and establishment of data analysis procedures, (4) administration of instrument, scoring, data analysis and interpretation, and (5) development of alternative models with accompanying rationales and philosophies for improving teacher education.

The review of the literature and research revealed a number of problems and issues currently facing preservice education, continuing education, and differentiated staffing. An analysis of present day thinking regarding these issues indicated a variety of descriptions, suggestions and recommendations for resolving some of them and for preventing the occurrence or recurrence of others. The problems, and the studies which described them along with the concomitant findings and recommendations, dealt with seventeen dimensions, or parameters, of teacher education: (1) Purposes and Methods of Preservice Education, (2) Responsibility and Accountability for Preservice Education, (3) Liberal Arts Program, (4) Recruitment, Selection, and Retention, (5) Psychology and Human Development, (6) Cultural Foundations, (7) Professional Standards, Certification, Placement and Welfare, (8) Planning and Developing Learning Activities, (9) Organizing and Providing for Learning Activities, (10) Evaluating and Improving Learning Activities, (11) Laboratory Experiences, (12) Student Teaching, (13) Internships, (14) Responsibility and Accountability for Continuing Education, (15) Purposes and Methods of Continuing Education, (16) Purposes and Methods of Differentiated Staffing, and (17) Responsibility and Accountability for Differentiated Staffing.

For present purposes, these seventeen parameters comprised the conceptual

framework for teacher education. This framework, which was derived from the review of literature, and the analysis of available suggestions, descriptive programs, and current thinking, was used to develop an original instrument. This 232-item instrument was called the Teacher Education Assessment Survey (TEAS) and was specifically designed (1) to ascertain the current status of teacher education in Ohio according to the seventeen parameters listed above, and (2) to determine how people felt about certain aspects of teacher education. Another part of the instrument, Part I Institutional Survey Data (ISD), attempted to find out how college officials described certain facets of their preservice programs. The data from the ISD were coupled with other materials such as college catalogues, bulletins, brochures, and other descriptive literature in an effort to learn how preservice education was being conducted at each institution during the 1969-1970 academic year.

A stratified random sample of eight Ohio teacher preparation institutions was selected. The criteria for selection were size of enrollment, administrative control (public or nonpublic), location (urban or nonurban), and sex (coeducational or noncoeducational). These colleges and universities constituted a sample that was not significantly different from the distribution of institutions throughout Ohio and included more than fifteen percent of all such accredited institutions in the state. Useable TEAS Answer Booklets were received from 42 college professors, 115 high school teachers and principals, and 141 college and high school students. All three groups were asked to indicate whether they agreed with certain statements about teacher education. Professors, teachers and principals were asked to indicate if certain teacher education activities were conducted at their institutions.

Electronic data processing was used to calculate Chi squares and related measures of statistical trends. These analyses helped identify which TEAS items were associated with significant agreement or disagreement among professors, among teachers and principals, and among students. The extent of significant agreements between groups was also tested.

Summary of the Findings of the Teacher Education Assessment Survey

Analysis of the responses of the TEAS revealed that 64 of the 232 items, or nearly 28 percent, were significantly descriptive of teacher education in Ohio. The respondents were significantly agreed, both within and between groups, that 31, or nearly half, of those items should be descriptive of Ohio teacher education programs.

There were no descriptive items with which the groups disagreed; that is, no group felt that any of the descriptive items should not be descriptive. Some items were agreed upon as descriptive of what was not happening. Respondents agreed that certain of those practices ought not happen either. None of these practices was descriptive. It was found that, in general, the secondary teacher preparation programs in the sample institutions:

1. Were not based on a written philosophy developed jointly by students and faculty
2. Stressed a national rather than international perspective
3. Tended to maintain rather than reduce the number of professional educational courses
4. Reflected the increasing multiplicity of the teacher role
5. Had a perceived balance of professional education, subject field concentration, and liberal arts study
6. Provided liberal arts programs which constituted about half the course work required for the Bachelor's degree
7. Provided liberal arts programs that preceded the professional sequence
8. Provided professional sequences according to the needs of the students
9. Provided professional instruction through a variety of methods, but not as a model for future secondary school teaching
10. Moved from vicarious to first-hand experiences

While all these statements are descriptive, only the last was regarded by all groups as something that should be happening. Statements 1, 2, and 6 lacked significant agreement by any one group. The other statements were agreed as things that should be happening by two groups.

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The descriptive items in the Responsibility and Accountability for Preservice Education parameter revealed that professors were usually familiar with the problems, policies, and procedures of the local school district; and that teacher organizations such as the OEA and the AFT were not responsible for establishing professional preparation programs. Equally important was the finding that no group could agree whether these organizations should have such responsibility. The institutions did not appear to have regular procedures for maintaining up-to-date preservice programs, even though all three groups significantly agreed that they should have them.

The liberal arts programs usually included required course work in the behavioral, natural, and social science, and in the humanities, physical education, and communication skills. Professors, teachers, and students agreed that work in the behavioral sciences and the humanities should be required. No group felt that physical education should be required in the liberal arts program.

The preservice programs were not based on the idea that anyone who can get a Bachelor's degree can or should be a teacher. All three groups felt this was as it should be. They also felt that students' academic progress should be reviewed regularly, which tended to be the case. The institutions did not generally require either a record of high academic achievement in college or a demonstrated ability to work with children as criteria for admission to the professional program.

A wide range of learning experiences was provided in the areas of psychology and human growth and development, including:

1. General educational psychology
2. Human growth and development
3. Adolescent psychology
4. Theories of learning

All three groups agreed that items 2, 3, and 4 above should be provided. Professors were not significantly agreed on item 1.

The data indicated that trainees were given instruction in contemporary issues in education, in how to decide what is important to teach and what is not, and in existing policies and practices regarding teacher welfare and certification. Professors were not significantly agreed that instruction in welfare and certification should be provided in preservice education. All three groups felt that placement services were necessary.

The preservice programs generally provided instruction in several areas

relating to the planning and development of learning activities, including:

1. The principles and practices of secondary education
2. Curriculum development
3. The use of educational theory
4. Making, selecting, and using learning materials and equipment

The professors did not significantly agree on whether instruction in any of these areas should be provided.

In the parameter "Organizing and Providing for Learning Activities," it was found that instruction was generally given in:

1. How to organize class groups for instruction
2. How to establish a positive classroom climate
3. How to manage the secondary school classroom
4. How to provide for the individual differences of children
5. Methods of teaching

Except for item 1, above, all three groups were significantly agreed that such instruction should be provided. All three groups felt that instruction should be given in how to use instructional materials centers and how to function as a member of a teaching team. The data did not indicate that such instruction was provided. Instruction in how to evaluate and report student progress was generally provided and was considered desirable by all three groups. Professors said their institutions provided instruction in how to keep up with new curriculum methods.

Laboratory experiences, such as observing and brief teaching opportunities were widely available as part of the preservice program. The institutions were also seeking new forms of laboratory experiences. All three groups felt these things were desirable. It was found that professional education courses were not taught only through laboratory experiences. Professors agreed that such courses ought not be taught only that way. Teachers and students were not so sure.

Student teaching assignments were long enough to allow development of teacher role-assumption rather than just teacher role-playing. Student teaching performance was usually a criterion for retention in the preservice program. Student teachers did not generally get—nor was any group significantly agreed that they should get—experience in an urban setting. All three groups felt the

student teaching assignment should be long enough to allow for the development of individual teaching style; however, this was not generally available.

Admission to internship programs was not dependent upon faculty recommendations; however, all three groups indicated it should be. It was also found that internships were not designed to replace the undergraduate professional sequence.

Teachers and professors agreed that most of the content in the undergraduate program requires additional study through continuing education programs. All three groups felt that the most important outcome of continuing education programs was what happens in the classroom. Analysis of current practices in continuing education showed that the school districts in the sample did not usually (1) require teachers to give up vacation time for continuing education programs, (2) provide such programs for substitute teachers, or (3) provide paid sabbaticals for study or travel. It was also found that teachers probably do not participate in as much as two weeks per year of continuing education and that teachers and professors in the sample institutions do not meet regularly to discuss professional problems.

The availability of training programs for auxiliary educational personnel, such as teacher aides, was sporadic. The data revealed that when these programs were given, they did not generally provide instruction in:

1. how to tutor students
2. how to help teachers with students who have problems
3. how to serve as laboratory assistants
4. how to help teachers with reading programs or in evaluating students

All three groups felt that differentiated staffing had many advantages, including:

1. More effective use of teacher talent
2. The facilitation of flexible scheduling, experimentation and innovation, the individualization of instruction, and cooperative planning for curriculum improvement
3. The opportunity for establishing more definitive roles for teachers which could, in turn, influence change in preservice programs
4. More opportunities for recognizing levels of teacher

responsibility, thereby allowing salary differences

All three groups felt that the State Department of Education, the universities, and the public schools should work together to train paraprofessionals and teacher aides. All agreed that different methods of recruiting and training were needed to provide for a differentiated instructional staff.

A Summary of the Assessment of Preservice Education
as Conducted by the Sample Institutions

Admission to the preservice program is precluded by admission to the institution. Criteria for admission generally include (1) graduation from a recognized high school with at least fourteen Carnegie units, including three years of English, two of a foreign language, two of mathematics, two of natural science, and two of social science,¹ (2) completion of a standardized admissions test such as the College Entrance Examination Board test or the Scholastic Aptitude Test, and (3) a campus visit and interview.

Following acceptance, enrollment, and freshman orientation, the trainee begins study in the liberal arts. This constitutes about fifty percent of the student's time, or about two years out of the four required for the Bachelor's degree. Liberal arts or general education includes about 60 semester hours of course work in the humanities (philosophy, literature, music and fine arts), mathematics, natural science, social science, foreign language, English, and physical education. Church-affiliated institutions provide for additional study in theology or religion. During this period of liberal arts study, the trainee confers with a faculty advisor who is appointed by the institution. He helps the trainee select a program and authorizes that selection.

The trainee is evaluated by letter grades. These are later converted to numerical grade-point equivalents, and the courses and grades entered in a permanent transcript. Trainees enroll in the professional sequence before the end of their sophomore year. Admission to the program consists of (1) a review of the transcript, (2) good physical health, (3) good moral character, and (4) an interview. Some institutions further require the satisfactory com-

¹Ohio law presently requires a minimum of seventeen Carnegie units to be graduated with a high school diploma.

pletion of introductory or "core" education courses.

About 21 semester hours of course work are required in professional education, including:

Theory and practice			
of secondary education	3	Semester	Hours
Cultural foundations	3	"	"
Educational psychology	6	"	"
Curriculum methods	3	"	"
Student teaching	6	"	"

Theory and practice of secondary education is an introductory course devoted to the functions, purposes, and goals of the American secondary school. The cultural foundations provide instruction in the history, sociology, or philosophy of education. Educational psychology courses attempt to provide knowledge in child growth and development and the learning processes. Curriculum methods courses, such as Biology Teaching Methods or Methods of Foreign Language Instruction seek to provide the skills necessary for conducting classes in a given subject or field.

Student teaching assignments vary in time, place, and depth. One institution in the sample required as few as 60 clock hours of actual teaching and 150 hours of related experience for a total of 210 combined clock hours of student teaching work. Another institution required 300 clock hours of actual student teaching plus 380 hours of related experiences for a total of 680 hours of student teaching work; more than three times the amount required by the former institution. Most student teaching requirements include 180 actual clock hours of student teaching and 25 hours of related experiences for a total of 205 hours of student teaching work.

Previous to the student teaching assignment, trainees have to complete certain other requirements, such as (1) completion of three-fourths of the work in a comprehensive major or two teaching fields, (2) at least average grades, (3) enrollment in full academic standing in the preservice program, and (4) completion of prerequisites.

Student teaching is frequently accompanied by seminars, conferences, and related course work. Student teaching performance is evaluated by a college supervisor who confers with the trainee and the cooperating teacher. The cooperating teacher is typically paid, usually less than fifty dollars, or given a tuition voucher redeemable at the preparing institution. The evaluations of student teachers tend to be more subjective than objective. It frequently con-

sists of a series of rating scales and written progress reports which include statements regarding the trainee's potential success as a secondary school teacher and a brief description of observed strengths and weaknesses.

Trainees who select a single comprehensive area are expected to devote about 60 semester hours of study to that area. Trainees selecting two related fields are expected to devote about 30 semester hours of study to each field. In either case the students are required to meet the certification standards of the State of Ohio Department of Education.

The Bachelor's degree requires about 120 semester hours of course work in the liberal arts, the major subject area, and in professional education. Most institutions require a residency period of at least one academic year. Recommendation for certification is based upon: (1) completion of all requirements for graduation such as course work, satisfactory grade-point average, payment of all fees, and good moral character, (2) satisfactory completion of all requirements for certification as prescribed by the State, (3) satisfactory completion of all field assignments, including student teaching, and (4) satisfactory completion of all necessary forms.

Placement services are handled by a full-time Placement Officer who also keeps students informed about available teaching positions. This is usually accomplished through a "Placement Office Bulletin Board," or some other means. Trainees are required to give the Placement Officer a completed Placement Folder, which is a resumé of the trainee's college background, his certification credentials, demographic data, and letters of recommendation attesting to his teaching potential and character.

Some institutions provide neither placement nor certification services. Placement follow-up is considered by most institutions to be desirable, but the administration and implementation of a regular program is difficult. Some institutions attempt to keep track of graduates and get feedback on a biennial basis.

Summary of Major Findings Concerning Continuing Education

The review of existing programs in continuing education, when coupled with an analysis of current thinking, views expressed in the literature, and the results of the Teacher Education Assessment Survey, suggested that:

1. Continuing education programs should be designed to bring about improvement in the classroom by changing the behavior of instructional personnel.
2. Some continuing education programs can help instructional personnel learn new knowledge and skills. These may be called new skills programs. Examples include first-time programs in ETC, CAI, or new curricula; recent developments in subject area such as attending a convention exhibit to review new materials and products.
3. Some continuing education programs can help instructional personnel to improve, review, or refine earlier knowledge and skills. These may be called refinement programs. Examples include "brush-up" or "refresher" programs, human relations and communications workshops, resource planning and revising.
4. Some continuing education programs can help instructional personnel develop innovative and alternative ways to apply existing skills in the classrooms. These may be called innovation programs. Examples include how to use ETV in improving instruction, reorganization conferences, curriculum materials laboratory.
5. Successful programs in continuing education require the involvement, acceptance and support of most, if not all participants.
6. Programs in continuing education need to be designed with careful consideration of what teachers regard as their learning needs instead of teacher educators independently deciding what teachers need.
7. Instructional personnel should not be required to "take" continuing education in the sense that once they have "taken it" they have "had it" and never need to "take it" again. This is a vaccination theory of teacher education.

8. As school curricula continue to change, so will the requisite tasks, functions, duties and responsibilities, and competencies of instructional personnel.
9. Continuing education programs are the vehicles through which educational improvement can most effectively occur.
10. Successful programs in continuing education require the involvement of instructional personnel as the agents rather than as the objects of change.
11. Successful programs in continuing education have realistic expectations for growth of instructional personnel.
12. Successful programs in continuing education require early involvement for maximum commitment to program goals and objectives.
13. Successful programs in continuing education have activities and purposes that are appropriate for accomplishing the goals of the program.
14. Successful programs in continuing education are coordinated and conducted by skilled directors, consultants, and other professional personnel.
15. Successful programs in continuing education require adequate resources including human, financial, physical, and material facilities.
16. Successful programs in continuing education require mechanisms for feedback, evaluation, revision.
17. Cooperative efforts between state, local, and national and regional education agencies are feasible and are beneficial to the improvement of continuing teacher education.
18. Continuing education programs should be developed which emphasize the concepts of teamwork, cooperation, and collaboration.

Summary of Major Findings
Concerning Differentiated Staffing

The review of existing differentiated staffing patterns, when coupled with an analysis of current thinking, views expressed in the literature, and the findings of the Teacher Education Assessment Survey, suggested that:

1. Differentiated staffing, as a conceptual approach to instruction, has many potential advantages, including:
 - (a) a more meaningful and responsive educational program for children
 - (b) the stimulation of new approaches to individualized instruction, team teaching, and other instructional strategies
 - (c) increased effectiveness of teachers as a result of facilitating their use of their skills and capabilities in their work with children
 - (d) enhancement of the status of teachers by recognizing the scope of their responsibility and competencies through differential salaries
 - (e) encouragement of closer interaction among teachers and between teachers and students
 - (f) a setting in which instructional personnel can complement each other
 - (g) the availability of a variety of career patterns for people concerned about the education of children
 - (h) a range of ways to utilize community and school talent and resources

2. Differentiated staffing, as a practical approach to school organization and administration, has been seen to create numerous problems, including:
 - (a) a demoralized teaching staff
 - (b) a continuing source of frustration for professional and paraprofessional educational personnel because of role-role conflicts, and other conflicts which obscure clear and accurate communication
 - (c) teachers' loss of confidence in those who organize, administer, and implement the differentiated staff design
 - (d) reluctance on the part of the staff to identify and affiliate with an organizational framework they believe was imposed on them
3. Some of the reasons for these problems have been identified as follows:
 - (a) plan put into operation too quickly
 - (b) insufficient funds for adequate planning and development
 - (c) inadequate staff involvement and orientation
 - (d) perceived contradictions in philosophy such as when authors claim that teachers will receive more money for greater instructional responsibility, and later say that more money will be paid according to an evaluation of their competence (looked upon by teachers as a sneaky insertion of merit pay)
 - (e) inadequate and poorly executed plans for community and student orientation

4. Teachers' attitudes toward differentiated staffing are probably influenced more by the way it is put into operation than by the concept itself.
5. Teachers and other instructional personnel need to be prepared to serve on a differentiated staffing assignment. This preparation should begin at the preservice level.
6. Differentiated staffing could mean the assumption of different instructional roles; it does not have to mean "better" or "more important" roles.
7. Successful alternatives in differentiated staffing schema depend upon careful consideration of several areas, including:
 - (a) recruitment and selection procedures and criteria for personnel
 - (b) orientation and in-service follow-up procedures
 - (c) organizational structure clearly defining line and staff relationships
 - (d) understanding of major functions, duties and responsibilities and other tasks related to staff roles and assignments
 - (e) salaries
 - (f) personnel policies
 - (g) evaluation procedures
8. The Federal government, the State Department of Education, the teacher preparation institutions, the

schools, the professional associations, and the research agencies need to strengthen and maintain their cooperative efforts of identifying, planning, funding, and operating programs which stimulate the improvement of instruction through better utilization of staff.

9. Ways to revise and otherwise refine staffing positions and responsibilities need to be built into the staffing arrangements.
10. The maintenance of a departmentalized, single-teacher classroom is no longer appropriate for operationalizing the kind of educational program secondary school students currently require.
11. Teachers need to learn a special set of affective and cognitive skills if the potential advantages of team teaching and differentiated staffing are to be realized. These skills include:
 - (a) human relations, especially in the areas of caring, loving, and helping
 - (b) subject matter competence
 - (c) learning modes and strategies
 - (d) how to say "no"
 - (e) evaluating - deciding - value-judging
 - (f) attitude development
 - (g) communicating
 - (h) how to say "I don't know"
 - (i) how to use media

Summary of the USOE Models

Before attempting to develop new theoretical models in teacher education, results of the recent Model Elementary Teacher Education Project, which was sponsored by the U.S. Office of Education, were reviewed. The purpose of this review was to learn what new concepts and approaches for strengthening teacher education were being suggested by some teacher preparation institutions.

Each model proposal was found to be unique in some way. The models also had important commonalities which, in many ways, made them more alike than different. For example, they were all based on the assumptions that universities are necessary to train teachers, that trained teachers are necessary in our system of American public education, and that the present system is the one that will continue. These and other fundamental assumptions were necessary to maintain uniform direction and goals.

The highlights of the models may be synthesized into a proposed generalized program of elementary teacher education. This generalized program begins with some statement of goals for teacher education. These goals are derived from an analysis of the projected futures of society which have been translated or interpreted as a set of behavioral objectives for children. To some extent the accomplishment of these objectives will affect the projected futures.

The trainee begins his program with admission to the institution of higher education and a period of liberal arts or general study. Before this liberal arts phase is completed, the trainee undergoes a screening process so that he may be admitted to the professional program in the school of education or other appropriate division of the institution. Admission to the program depends upon certain criteria. For example, the University of Georgia Model requires an examination of high school records, completion of certain test batteries, and faculty recommendations. The model proposed by Florida State suggests selection criteria such as general college ability, commitment to education as a profession, and good health.

After admission to the program, the trainee participates in a professional sequence and in an academic subject-content sequence. The professional sequence may consist of "modules" instead of "courses," but the kinds of experiences may be similar. Different models stressed different components of the professional education sequence. The Syracuse Model emphasized an affective-human relations approach; the Toledo Model, the instructional procedures and technology approach. Michigan State's proposal called for an Interpersonal Process Recall (IPR) technique which is a behavioral science

approach. Most of the model proposals included numerous opportunities for student teaching, microteaching, and similar laboratory-oriented and clinical experiences. The University of Pittsburgh model stressed an individualized approach along with a clinical setting. Individualization, in most programs, was provided by allowing varying amounts of in-depth experiences in the different components of the professional sequence.

Study in academic content may include foreign languages, mathematics, social science, or any appropriate subject area of the trainee's choice relating to the elementary school curriculum. Other choices exist for trainees at various points in the program, such as pupil age-level choice or freedom to apply accumulated credits to a different area entirely.

When most of the preservice program is completed, the trainee may engage in an internship experience, as proposed by Syracuse University, or enter into a differentiated staffing assignment as provided by the University of Massachusetts model. It is at this juncture where preservice wanes and in-service waxes.

Support systems were also provided. These systems are mechanisms necessary to operationalize the models. Program support systems were necessary for scheduling and organizing the programs. Information and evaluation systems provided content material and feedback; and the control support systems provide the necessary resources for implementing the programs.

Summary Descriptions of Theoretical Models for Improving Teacher Education

The current status of secondary teacher education in Ohio was investigated along three frontiers: preservice education, continuing education, and differentiated staffing. This survey assessment included (1) a review of the literature, (2) an analysis of the results of the Teacher Education Assessment Survey, (3) discussions and conferences with students, teachers, administrators, professors, consultants, and other scholars, (4) visitations, (5) a review of existing programs in teacher education, and (6) examination of printed materials describing teacher education programs as conducted in eight Ohio colleges and universities.

The major outcome of this assessment was the development of three proposed teacher education models. The preservice education model was based on the major assumptions that (1) teacher training should prepare professional

personnel for certain differentiated staffing positions, (2) personal need-dispositions are significant factors for determining which differentiated staffing position one should prepare for, and (3) teacher education is a continuous process that extends beyond certification and transcends experience.

The model is characterized by alternate periods of study and practical experience in the community and in the schools. The kind of study and work experience will depend upon the personality of the student and the type of instructional position he expects to fill. For certain students, those who tend to be idiographic or person-oriented, it will mean following a program designed to strengthen their affective skills while concurrently developing their cognitive skills. Trainees seeking specialized training in the affective aspects of learning can pursue a Bachelor's degree program leading to provisional certification as a Learning Specialist. Permanent certification will require additional experience and a Master's degree with emphasis on the behavioral sciences.

For other students, such as those who tend to be nomothetic or institution-task oriented, it will mean pursuing a pattern of study and work geared toward strengthening their cognitive skills while concurrently developing their affective skills. Students seeking specialized training in the cognitive aspects of learning can pursue a Bachelor's degree program leading to provisional certification as a Subject Matter Specialist. Permanent certification will require additional experience and a Master's degree with emphasis on an academic subject field.

Some students, such as those who have the desire and ability to combine their talents in the cognitive and affective aspects of teaching and learning, may follow a transactional Master's degree program leading to permanent certification as an Educational Specialist. This program would carry a dual emphasis on behavioral science and academic subject matter. It could also be prerequisite training for future school administrators.

A Bachelor's degree program for preparing Instructional Communication Specialists and a two-year Associate in Arts program for preparing Learning Technicians were also described.

The differentiated staffing model provided for Learning Specialists and Learning Technicians to work directly with children and with Subject Matter Specialists. This relationship was established because the Learning Specialist has had specialized training in learning processes, psychology, and instructional strategies; whereas the Subject Matter Specialist has been specifically trained in academic content, curriculum development, research, and evaluation procedures. These two persons work cooperatively with the Instructional Communications Specialist. This person will be responsible for the storage

and retrieval of educational information and learning materials, and for the storage, maintenance, and allocation of the equipment related to learning.

Support Services personnel, including Pupil Personnel services, Administrative Services, Auxiliary Services, and Community Services, are included in the differentiated staffing scheme.

The model for continuing education consisted of an organizational framework for improving (1) the coordination of continuing education programs within the State, (2) identification of instructional problems facing secondary education in the State, (3) state-wide perspective on the nature and scope of the problems, and (4) efforts to resolve these problems through the cooperative development programs.

This model suggests the establishment of twelve Regional Continuing Education Agencies (RCEA). These RCEAs will be responsible for helping the school districts in their respective regions (1) to identify instructional areas requiring strengthening, (2) to develop continuing education programs designed to accomplish this strengthening, (3) to provide assistance in planning and implementing the programs, and (4) to serve as a regional clearinghouse and resource center for continuing education.

The RECA's will submit continuing education program proposals developed by the school districts to a State Continuing Education Advisory Committee (SCEAC). This fifteen member committee of educators, laymen, and professionals from the State Department of Education will review these proposals and will present recommendations to the State Department of Education. These recommendations will concern priorities, financial matters, time schedules, and other administrative considerations.

The model calls for some means of financial assistance from the state and suggests a matching fund program. It suggests that the state underwrite 50 percent of the cost of any continuing education program submitted by the RCEA and recommended by the SCEAC.

No summary could attempt to describe all features of these models. The reader is invited to review the full report which provides additional details.

Summary of the Recommendations

The major recommendations and suggestions were:

1. That planning studies be conducted by interested institutions to determine the feasibility of implementing the models.
2. That the State of Ohio Department of Education help provide the funds to conduct these feasibility studies.
3. That the validity of the hypotheses underlying the development of the models be tested.
4. That the institutions in the sample be given preference for conducting the feasibility research.
5. That priorities in teacher education be considered in terms of
 - (a) the reexamination of the goals of secondary education
 - (b) the distribution of educational needs throughout the state
 - (c) the potential for the proposed changes to satisfy those needs
 - (d) the availability of the necessary funds and resources
 - (e) the inclinations and the capabilities of the institutions
 - (f) the availability and willingness of the leadership necessary for planning and coordinating the change effort



APPENDIX I
STATE OF OHIO
DEPARTMENT OF EDUCATION



Part I. Institutional Survey Data

Teacher Education Assessment Project

Date _____ This Part of the
Survey Completed By _____
Position _____

I. Name of Institution _____
Address _____

A. Head of Dept. of Education _____

Telephone and Extension _____

B. In Charge of Sec. Education _____

Telephone and Extension _____

C. Teacher Placement Officer _____

Telephone and Extension _____

D. Number of full-time
Guidance Counselors
available for students _____

II. Type of Institution

A. _____
Supported By

B. _____
Controlled By

C. _____
Year of Founding of Institution
(estimate)

D. _____
Year Approved for Teacher Education
(estimate)

E. Fields of teacher education in which currently approved:

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_____	_____
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____

F. Agencies by which the institution is accredited in the field of education:

_____	_____
_____	_____
_____	_____

G. Degrees authorized to confer:

<u>Name of Degree</u>	<u>Date of Authorization (estimate, if necessary)</u>
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____

H. Number of Bachelor's degrees expected to be conferred by the institution during the 1969-1970 academic year.

(estimate, if necessary)

III. Current Enrollment

A. All inclusive total for entire institution

B. All inclusive total for Department of Education

IV. Admission Standards for entrance to the University

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A. List high school units required

_____	_____	_____	_____	_____
_____	_____	_____	_____	_____
_____	_____	_____	_____	_____
_____	_____	_____	_____	_____

B. Name of tests used for admission purposes

<u>Name of Test</u>	<u>Percentile for Admission</u>
_____	_____
_____	_____

C. What additional selection and retention techniques are followed for under-graduates?

V. Admission Standards for entrance to the Department of Education.

A. List courses required

<u>Course Name</u>	<u>Credit Hours</u>	<u>Cat. No.</u>
_____	_____	_____
_____	_____	_____

B. Name tests used for admission purposes

<u>Name of Test</u>	<u>Percentile for Admission</u>
_____	_____
_____	_____

C. Describe other selection techniques and criteria.

D. What retention techniques are followed for students in education?

VI. Guidance

A. How are students kept informed on supply-demand data?

B. How are students kept informed of certification and renewal requirements?

C. How are teacher candidates kept informed of available teaching positions and school personnel visitations to the Teacher Placement Office?

D. How are transfer students admitted to the Department of Education?

VII. Standards for Graduation

A. _____
Point Hour Ratio

B. _____
Student Teaching Grade

C. Minimum residence requirement _____

D. Others _____

E. Curriculum requirements:**1. Professional preparation for provisional secondary teachers:**

- a. Minimum number of semester hours _____
(or quarter hours) _____
- b. Maximum number of semester hours _____
(or quarter hours) _____

2. Liberal Arts or General Education:

- a. Minimum number of semester hours _____
(or quarter hours) _____
- b. Maximum number of semester hours _____
(or quarter hours) _____

**F. ESTIMATED NUMBERS OF 1969-1970 SECONDARY
EDUCATION GRADUATES BY FIELD AND
TYPE OF CERTIFICATION**

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Field of Specialization	TYPE OF CERTIFICATE RECOMMENDED ^a		
	Provisional High School	Dual	Provisional Special
BUSINESS EDUCATION (including bookkeeping, stenography, typing, and salesmanship-merchandising)			
ENGLISH (including speech)			
FINE ARTS (including art and vocal and instrumental music)			
FOREIGN LANGUAGE			
HEALTH EDUCATION AND PHYSICAL EDUCATION			
HOME ECONOMICS			
INDUSTRIAL ARTS			
MATHEMATICS			
NATURAL SCIENCES (including earth science, general science, physical science, chemistry, and physics)			
SOCIAL SCIENCES (including history and government)			
OTHER: (List)			

^a In each column, indicate for the current academic year approximately how many students will be recommended for each type of certification according to the State Department of Education Laws and Regulations Governing the Certification of Teachers, Administrators, Supervisors, and School Employees in Pupil Personnel Service, effective January 1, 1963.

VIII. Student Teaching:

- A. Person in charge _____
- B. Number of College Supervisors _____
- C. How many of the college supervisors included in this number do not have at least 3 (three) years of teaching in secondary school? _____
- D. Secondary Student Teaching Centers
1. On-Campus Center _____
number of pupils
2. Number of Off-Campus Centers _____
- E. Plan for reimbursing public school
- _____
- _____
- _____
- _____
- F. Clock hours of actual student teaching _____
- G. Clock hours of related experience _____
- H. How often does the person in charge of student teaching or the college supervisor visit each student teacher?
- _____
- _____
- _____
- I. How many student teachers equal a full time teaching load for college supervisors? _____

- IX. Is there a plan in operation for the purpose of evaluating the effectiveness of the Teacher Education program? Describe briefly.
- X. Describe what the institution's Department of Education is doing or planning to do within the next year in the way of research or experimentation.
- XI. Include an administrative chart of organization under which the Department of Education operates.

Please return in the enclosed self-addressed stamped envelope to:

Lawrence J. Marquit
Teacher Education Assessment Project
Educational Research Council of America
Rockefeller Building
614 Superior Avenue
Cleveland, Ohio 44113

APPENDIX II



TEACHER EDUCATION ASSESSMENT PROJECT

ROCKEFELLER BUILDING • CLEVELAND, OHIO 44113 • TELEPHONE: (216) 696 8222



Winter, 1970

Dear Professor:

Your university was selected from among fifty-three others in the state to participate in a research project on teacher education in Ohio. We would appreciate it if you will respond to the enclosed survey. Your response can provide valuable input which can be used in the development of teacher education models. The directions for this survey are attached to it.

This instrument cannot and will not be used to evaluate you, your college, or anyone connected with it. The results will be used for statistical purposes only. No names are requested.

This Project is funded by an ESEA Title III grant. It is being conducted by the Educational Research Council of America for the State of Ohio Department of Education. If you have any questions, you may call me collect at Area Code 216: 696-8222. Thank you in advance for your participation.

Sincerely yours,

Lawrence J. Marquit
Research Associate

LJM/es
attachment

APPENDIX III

STATE OF OHIO
DEPARTMENT OF EDUCATION

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Part II. Teacher Education Assessment Survey



Teacher Education Assessment Project

Form CP

The purpose of this instrument is to find out what is currently happening in secondary school teacher education in Ohio. It is divided into two Sections. Both Sections contain statements concerning three areas: pre-service, continuing education, and differentiated staffing and staff utilization. The statements were compiled after reviewing many books, research articles, and other published resources in these areas. Section 1 consists of statements which express a certain point of view. Section 2 consists of statements worded to describe what may be an existing condition, attitude, or belief regarding teacher education at your institution.

Your responses to this instrument will be used for statistical purposes only. They will not be used to evaluate you, your institution, or its programs. While the major emphasis is on secondary teacher preparation, most of the statements could refer to all levels of teacher education.

The following terms are defined for purposes of this Survey:

- Pre-service program Synonymous with secondary teacher preparation program. Refers to any planned sequence of undergraduate study conducted in a degree-granting institution of higher education that was specifically designed to prepare qualified and certified teachers for Ohio's secondary schools.
- Continuing education program Synonymous with in-service education. Refers to any planned sequence of learning experiences made available to secondary teachers in the public schools for the purpose of improving their skills as teachers.
- Differentiated staffing and staff utilization Both refer to any organizational pattern of a public school staff designed to coordinate their special knowledges and skills for the purpose of improving the learning opportunities of children. For example, when professional teachers and assistants, such as teacher aides, work together in a classroom.

THIS INSTRUMENT IS ACCOMPANIED BY AN ANSWER BOOKLET. PLEASE SEE THE ANSWER BOOKLET FOR DIRECTIONS ON HOW TO RESPOND TO THIS SURVEY.

Part II
Teacher Education Assessment Survey (Form CP)

You may keep this Survey Form. Please return only the answer booklet in the enclosed self-addressed, stamped envelope to:

Lawrence J. Marquit
Teacher Education Assessment Project
Educational Research Council of America
614 Rockefeller Building
Cleveland, Ohio 44113

We hope to receive all the completed answer sheets by February 28, 1970.
Your cooperation is appreciated.

LJM/es
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TEACHER EDUCATION ASSESSMENT SURVEY

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Section 1

Please place your responses
in the enclosed answer booklet.

1. Gifted teachers should be allowed to exert a much greater influence on their students and colleagues than less gifted teachers.
 2. Differentiated staffing could allow for the more effective use of teacher talent.
 3. Different amounts of teaching responsibility should allow for salary differentials.
 4. Differentiated staffing can reduce teacher dropout.
 5. Teacher education programs can be made more specific as differentiated staffing roles become better defined.
 6. Differentiated staffing can create more jobs for the economically poor.
 7. Differentiated staffing could help relieve the manpower shortage in classrooms.
 8. Differentiated staffing can serve as a valuable link between the schools and the community.
 9. Differentiated staffing can provide children with more individualized instruction.
 10. Differentiated staffing could allow for a more flexible schedule.
 11. Differentiated staffing could improve intercultural contacts.
 12. Differentiated staffing could provide additional male models for male students.
 13. Differentiated staffing positions could provide for voluntary upward mobility for some paraprofessional personnel.
 14. The training of paraprofessionals and teacher aides should be the joint responsibility of the schools, the universities, and the State Department of Education.
 15. Differentiated staffing hierarchies should be based on educational backgrounds and experience.
-

Teacher Education Assessment Survey

16. Differentiated staffing allows the teacher more time for lesson preparation.
17. Different modes of recruitment and training are needed to provide for a differentiated instructional staff.
18. Differentiated staffing allows teachers greater flexibility to experiment and innovate.
19. Differentiated staffing enables teachers to better create and structure curriculum.
20. Differentiated staffing is acceptable as long as it is established on a horizontal rather than hierarchical scale.
21. Differentiated staffing is primarily a device for implementing merit pay.
22. Differentiated staffing is primarily a device for improving the learning opportunities of children.
23. Secondary teacher preparation should be in separate agencies of higher education, like medicine and law, and should have as a prerequisite, the Bachelor's degree.
24. Continuing education should be developed and financed by the school district.
25. Continuing education should be developed by the school district and financed by the State of Ohio Department of Education.
26. Continuing education should be developed and financed by the State of Ohio Department of Education.
27. Continuing teacher education should be a joint school-university responsibility.
28. Continuing education is more important for teachers than pre-service education.
29. The development of continuing education programs is the responsibility of the public schools.
30. What happens in the secondary school classroom is the most significant outcome of continuing teacher education.
31. Teacher aides should be responsible to no more than five teachers.

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Teacher Education Assessment Survey

SECTION 2

32. All of our secondary teachers-in-training follow the same preparation program sequence.
33. Our teacher preparation program is based on an explicit foundation of educational philosophy developed by students and faculty.
34. Our teacher preparation program is based on the current learning problems of children.
35. Our teacher preparation program is involved in a plan to substantially reduce the number of professional courses.
36. Our professional courses have carefully defined behavioral objectives.
37. Our professional sequence provides for individual differences in student ability.
38. Our teacher preparation program is based on the concept that anyone who can complete the requirements for a Bachelor's degree can learn to be a teacher.
39. Our recruitment program for students in teacher education is aimed primarily at Ohio.
40. The State of Ohio makes financial loans available for able and needy students who wish to become teachers.
41. Our teacher preparation program strongly encourages a common entry point for all students.
42. Admission to our teacher preparation program is based on a carefully planned screening procedure, i. e. , highly selective.

Admission to our teacher preparation program includes the following criteria for students:

43. demonstrated ability to communicate effectively.
44. above average intelligence.
45. good physical health.
46. emotional stability and maturity.
47. record of high academic achievement in college.
48. evidence of commitment to teaching.
49. demonstrated ability to work with children.

Teacher Education Assessment Survey

50. The academic progress of students enrolled in our teacher preparation program is subject to regular review.
51. In our institution, the academic discipline is considered the most important ingredient in secondary teacher preparation.
52. In our institution, the major difference between elementary and secondary teacher preparation is that the latter has more emphasis in an academic discipline.
53. Our secondary teacher preparation program provides a broad background in the major academic discipline (subject area, e.g., biology) with a strong concentration in a minor discipline (e.g., botany).
54. Our program operates on the belief that secondary school teachers should be specialists in an academic discipline, not generalists.
55. We have a placement service.
56. We follow up on all, or nearly all, students after placement.
57. We recommend certification in only one subject area for any one student (e.g., English; not English and a foreign language).
58. We base our recommendation for certification on demonstrated performance rather than on accumulated college credits.
59. We provide placement services only for those students whom we recommend for certification.
60. We have a regular procedure for keeping the contents of our secondary teacher preparation program up-to-date.
61. Our professional education courses are provided only via clinical and first-hand laboratory experiences.
62. Our secondary teacher preparation program moves from vicarious to first-hand experiences.
63. Our professional sequence for the training of secondary teachers is set mainly by teacher organizations, such as the OEA or AFT.
64. Our professional sequence for the training of secondary teachers is set mainly by the Ohio State Department of Education.
65. Planning and implementing teacher preparation is exclusively the responsibility of the university's Department of Education.

Teacher Education Assessment Survey

66. Our secondary teacher preparation program is mostly influenced by the liberal arts scholars.
67. Our professors who share in the responsibility for preparing secondary teachers are familiar with the everyday problems of the public school.
68. Our professors who share in the responsibility for preparing secondary teachers are familiar with local school policies and procedures.
69. Our secondary teachers-in-training are taught mostly via programmed learning.
70. For the most part, our secondary teachers-in-training are taught by the entire university faculty according to how they are expected to teach; i.e., according to the methods they are expected to use.
71. Our secondary teacher preparation program stresses an international rather than national perspective.
72. The Ohio State legislature provides leadership for our institution to coordinate public elementary and secondary education with higher education.
73. Our secondary teacher preparation program demonstrates an awareness of the increasing multiplicity of teachers' roles.
74. Our liberal arts or general education program precedes the professional sequence.
75. The liberal arts program for our secondary teachers-in-training constitutes the entire four years. The professional sequence begins after the Baccalaureate.
76. The liberal arts or general education program for our secondary teachers-in-training usually constitutes about half of the course work required for the Bachelor's degree.
77. It is our intention that the liberal arts program provide students with the basis for selecting the subject field they intend to teach.

Our liberal arts program for secondary teachers includes required course work in:

78. Behavioral sciences, e.g., general psychology
79. Natural sciences, e.g., zoology, physics, chemistry
80. Social sciences, e.g., sociology

Teacher Education Assessment Survey

Our liberal arts program for secondary teachers includes required course work in: (continued)

- 81. Humanities, e.g., literature, fine arts, and philosophy
- 82. Mathematics
- 83. Foreign language
- 84. Practical arts and the world of work
- 85. Physical education
- 86. Communication skills

All our secondary teachers-in-training receive instruction in:

- 87. the principles of secondary education.
- 88. how to apply the principles of secondary education.
- 89. how to handle social events (extra-curricular activities, chaperoning)
- 90. how to develop educational policies.
- 91. educational leadership functions.
- 92. how to recruit others into the education profession.
- 93. how to organize a class for effective instruction.
- 94. the principles of educational finance.
- 95. how to use principles of educational finance.
- 96. the principles of adolescent psychology.
- 97. how to apply the principles of adolescent psychology in the classroom.
- 98. contemporary issues in education.
- 99. how to use the resources of the State Education Department.
- 100. the organization and administration of American education.
- 101. how to help high school students adapt to their community.

Teacher Education Assessment Survey

All our secondary teachers-in-training receive instruction in: (continued)

102. how to use small and large group instruction effectively.
103. how to function as a member of a teaching team.
104. how to demonstrate respect for secondary school students.
105. how to prepare and use simulation materials.
106. how to use themselves as learning resources for secondary school students.
107. the principles of guidance and counseling.
108. how to apply the principles of guidance and counseling.
109. the principles of social psychology.
110. how to apply the principles of social psychology.
111. the principles of educational philosophy.
112. how to apply the principles of educational philosophy.
113. the principles of social philosophy.
114. how to apply the principles of social philosophy.
115. the principles of educational sociology.
116. how to apply the principles of educational sociology.
117. how to meet individual differences by providing meaningful individualized learning activities.
118. how to help youth build constructive value systems for themselves.
119. urban sociology and psychology.
120. general educational psychology.
121. how to apply the principles of educational psychology.
122. the principles of human growth and development.
123. how to apply the principles of human growth and development.

Teacher Education Assessment Survey

All our secondary teachers-in-training receive instruction in: (continued)

124. using and applying educational research, including statistics.
125. the theories and applications of programmed learning.
126. how to provide learning activities in a non-graded school.
127. how to plan and teach in the framework of a modular or other type of flexible schedule plan.
128. the principles of secondary curriculum construction.
129. how to apply the principles of curriculum development.
130. how to evaluate and report student progress.
131. how to decide what is important to teach and what is not.
132. school-community relations.
133. how to apply educational theory in the classroom.
134. how to use community welfare and other similar agencies outside the school.
135. how to supervise student teachers (e.g., how to serve as a sponsor- or cooperating-teacher).
136. how to use instructional technology, such as educational television and computer-assisted instruction.
137. how to develop leadership skills in secondary school students.
138. how to develop a sense of creativity in secondary school students.
139. how to manage a secondary school classroom.
140. theories of learning.
141. how to apply the theories of learning to what happens in the classroom.
142. how to be creative or how to use their own extant creative abilities in the classroom.
143. methods of teaching.

Teacher Education Assessment Survey

All our secondary teachers-in-training receive instruction in: (continued)

144. how to use, conceptualize, and synthesize knowledge.
145. the history of education.
146. teacher welfare and certification.
147. how to conduct a self-contained class.
148. how to help students become responsible community citizens.
149. how to establish a positive classroom climate.
150. how to make, select, and use learning materials and equipment.
151. how to use the resources of research agencies.
152. how to plan, participate in, and contribute to programs in continuing education.
153. how to keep up with new curricula and new methods.
154. how to develop self-directing, sequenced learning materials for independent study.
155. how to keep up with new developments in educational technology.
156. how to use instructional materials centers and similar resources.
157. how to use students as tutors (i. e. , one student to give individual help to another student).
158. how to conduct and/or participate in cooperative educational research projects.
159. how to participate in an accreditation team such as the National Council for the Accreditation of Teacher Education, or the North Central Association of Colleges and Secondary Schools.
160. how to apply the experiences gained through foreign and domestic travel in the classroom setting.

Teacher Education Assessment Survey

All our secondary teachers-in-training receive instruction in: (continued)

161. how to identify their own professional strengths and weaknesses and translate them into behavioral objectives for the future.

162. the duties and responsibilities of teacher aides and other paraprofessional personnel.

163. Laboratory field experiences, such as observing and teaching a brief lesson in a public school, are provided as a part of our professional preparation program.

164. The Internship is a part of our professional preparation program.

Admission to our internship program depends on the following criteria:

(Note: If you do not have an internship program, skip Categories I and II and respond only to Categories III and IV.)

165. student teaching success.

166. faculty recommendations.

167. scholastic rank.

168. character.

169. success in methods courses.

170. Our interns receive a stipend.

171. Our internships last more than one academic year.

172. Our internships last less than one academic year.

173. Our internships are accompanied by concurrent course work.

174. Our internships are at the post-Baccalaureate level.

175. Our student-teaching is followed by additional course work.

176. Feedback from student-teachers and cooperating-teachers is regularly incorporated into our professional course revisions.

177. Our student-teaching assignments allow for individual differences.

178. Our student-teachers participate in group counselling sessions.

Teacher Education Assessment Survey

179. Our period of student teaching is generally long enough to allow for individual style to be developed.
180. Our student-teaching experience encourages the development of teacher-role assumption, not teacher-role playing.
181. Our cooperating-teachers are usually selected by school principals.
182. Cooperating-teachers are usually selected by our own personnel.
183. Student-teaching performance is one of our retention criteria.
184. Orientation is provided for our cooperating-teachers as well as student-teachers.
185. Student team-teaching is a regular part of our student-teaching program.
186. Most of our student-teachers get experience in an urban setting.
187. Our student-teaching program provides opportunities for experience in all phases of teachers' work.
188. New forms of laboratory experiences are being developed at our institution.
189. The amount of our student laboratory experiences increases gradually, beginning at the start of our professional program.
190. Our students participate in simulation exercises.
191. Our students have opportunities to work with secondary school students on an individual tutorial basis.
192. Our students participate in microteaching.
193. Laboratory experiences are used to help our students learn how to evaluate the effects of teaching.
194. We provide opportunities for microteaching as a team member.
195. Opportunities are available for our students to participate in sensitivity training.
196. We encourage school districts to earmark a regular percentage of their budget to research and continuing education.

Teacher Education Assessment Survey

- 197. We encourage our area school districts to provide their teachers with paid sabbatical leaves.
- 198. We encourage secondary teachers to participate in intervisitations.
- 199. We encourage school districts to utilize holiday or vacation time, such as Christmas and Thanksgiving, for continuing education programs.
- 200. We encourage school districts to provide salary increments for teachers who participate in continuing education programs.
- 201. We encourage teachers to participate in at least two weeks per year of continuing education.
- 202. We encourage the use of State Education Department guidelines for continuing education programs.
- 203. We encourage teachers to work together for improving what happens in the classroom.
- 204. Our institution provides training for paraprofessionals and teacher aides.

Our training program(s) for auxiliary educational personnel, such as paraprofessionals and teacher aides, provides instruction in:

- 205. how to tutor secondary school students.
- 206. how to help secondary school students do independent study.
- 207. how to help secondary school students organize extra-curricular activities.
- 208. how to set up audiovisual equipment.
- 209. how to help teachers with emotionally upset students.
- 210. how to serve as laboratory assistants, e.g., chemistry.
- 211. how to help the teacher in reading and evaluating students.
- 212. how to help the teacher with instructional activities in art, music, and on field trips.
- 213. how to file educational materials.
- 214. how to operate duplicating equipment.

Teacher Education Assessment Survey

Our training program(s) for auxiliary educational personnel, such as paraprofessionals and teacher aides, provides instruction in: (continued)

- 215. how to type.
- 216. how to record grades.
- 217. how to supervise cafeterias, hallways, and lavatories.
- 218. how to help in the library.
- 219. how to distribute instructional materials.
- 220. how to supervise clean-up activities.
- 221. how to communicate with secondary school students.
- 222. how to use other staff members' skills effectively.
- 223. Before teacher aides, paraprofessionals, and other auxiliary educational personnel are admitted to our training program, they must show evidence of a commitment to the field of education and to their own continued growth.
- 224. Preparation for our paraprofessional personnel is primarily first-hand rather than theoretical or vicarious.
- 225. We provide opportunities for teachers and paraprofessionals to participate together in course work.
- 226. Our area school districts provide continuing education programs for substitute teachers.
- 227. We provide continuing education programs which stress the non-tutorial role of teachers.
- 228. Many members of our staff conduct continuing education workshops in school districts during the regular school year.
- 229. Our continuing education workshops are conducted as demonstration models.
- 230. Our institution provides for an on-going program where school and university personnel can meet to discuss professional problems.
- 231. Our continuing education programs are used by school administrators to identify prospective administrators and supervisors for their districts.
- 232. The continuing education programs at our area school districts frequently stress academic subject matter content.

Thanks again for your cooperation.

APPENDIX IV



Teacher Education Assessment Survey Answer Booklet
DIRECTIONS



FORM CP

Section 1. As you read each item in this Section, please indicate the extent of your agreement with each statement by placing an "X" in the appropriate cell on the answer sheet.

If you wish to qualify any item in this Section or later Sections, please use the back of the answer sheet and indicate the item number.

Section 2. This Section has four major response categories.

Category I asks if the item describes an existing condition. If it does, then put an "X" in the "yes" column and go on to Category II. If the statement does not describe something that is currently happening, put a "X" in the "no" column and go to Category III. If you don't know if the statement describes something currently happening, put a "X" in that column and go on to Category IV.

Category II should be answered only if the item describes something currently happening; that is, you checked "yes" in Category I. In Category II indicate at which point, or points, the described condition occurs. For example, if it occurs during the second year of college, then put an "X" in the "2" column. If it occurs during years three and four, then "X" both those columns. If the item describes something that occurs after the Bachelor's degree, then "X" the "continuing education" column. In Category II, please "X" all columns that apply.

Category III asks if the item describes a condition that you feel should exist at your institution or in school districts in your area. If you think it should exist at all, then put an "X" in the "yes" column and go on to Category IV. If you think it should not occur, then put an "X" in the "no" column and go on to the next item. If you are not sure about whether it should exist, or if you want to qualify your response, then put an "X" in the "I don't know column" and note any qualifying conditions on the back of the answer sheet and indicate the item number.

Category IV is the same as Category II except that it refers to your

Teacher Education Assessment Survey Answer Booklet
Directions—Form CP

feelings about when the item should occur.

You may keep your copy of the Survey, but please return this entire answer booklet with your comments in the enclosed self-addressed, stamped envelope to:

Lawrence J. Marquit
Teacher Education Assessment Project
Educational Research Council of America
614 Rockefeller Building
Cleveland, Ohio 44113

Section 1

Item	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
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Section 2

CATEGORY I				CATEGORY II					CATEGORY III			CATEGORY IV					
Does the described condition exist?				If it does, when does it?					Should the described condition exist?			If you think it should, when should it?					
Item	Yes	No	I don't know	Undergraduate year(s)				Continuing Education	Yes	No	I don't know	Undergraduate year(s)				Continuing Education	
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Teacher Education Assessment Survey—FORM CP
Section 2

409

CATEGORY I				CATEGORY II					CATEGORY III			CATEGORY IV				
Does the described condition exist?				If it does, when does it?					Should the described condition exist?			If you think it should, when should it?				
Item	Yes	No	I don't know	Undergraduate year(s)				Continuing Education	Yes	No	I don't know	Undergraduate year(s)				Continuing Education
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Teacher Education Assessment Survey—FORM CP
Section 2

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Does the described condition exist?				If it does, when does it?					Should the described condition exist?			If you think it should, when should it?					
Item	Yes	No	I don't know	Undergraduate year(s)				Continuing Education	Yes	No	I don't know	Undergraduate year(s)				Continuing Education	
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Teacher Education Assessment Survey—FORM CP
Section 2

411

CATEGORY I				CATEGORY II					CATEGORY III			CATEGORY IV				
Does the described condition exist?				If it does, when does it?					Should the described condition exist?			If you think it should, when should it?				
Item	Yes	No	I don't know	Undergraduate year(s)				Continuing Education	Yes	No	I don't know	Undergraduate year(s)				Continuing Education
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Teacher Education Assessment Survey—FORM CP
Section 2

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Does the described condition exist?				If it does, when does it?					Should the described condition exist?			If you think it should, when should it?					
Item	Yes	No	I don't know	Undergraduate year(s)				Continuing Education	Yes	No	I don't know	Undergraduate year(s)				Continuing Education	
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Teacher Education Assessment Survey—FORM CP
Section 2

413

CATEGORY I				CATEGORY II					CATEGORY III			CATEGORY IV				
Does the described condition exist?				If it does, when does it?					Should the described condition exist?			If you think it should, when should it?				
Item	Yes	No	I don't know	Undergraduate year(s)				Continuing Education	Yes	No	I don't know	Undergraduate year(s)				Continuing Education
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Teacher Education Assessment Survey—FORM CP
Section 2

CATEGORY I				CATEGORY II					CATEGORY III			CATEGORY IV				
Does the described condition exist?				If it does, when does it?					Should the described condition exist?			If you think it should, when should it?				
Item	Yes	No	I don't know	Undergraduate year(s)				Continuing Education	Yes	No	I don't know	Undergraduate year(s)				Continuing Education
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How many years experience do you have in teacher education? _____

What is your major instructional area: education _____ liberal arts _____ both _____



TEACHER EDUCATION ASSESSMENT PROJECT

ROCKEFELLER BUILDING • CLEVELAND, OHIO 44113 • TELEPHONE: (216) 696-8222



Winter, 1970

Dear Student:

You were selected from among many other students to participate in a research project on teacher education in Ohio. We would appreciate it if you will respond to the enclosed survey.

We are asking you to respond because we think that persons like yourself are really what schools and education are all about.

The directions for this survey are attached to it. If you are a college student who has completed, or almost completed, student teaching, please put an "x" in the space under Item 232 on Page 4 of your answer booklet.

This is not a test. It cannot and will not be used to evaluate you, your school, or anyone connected with it. We are only concerned with what you, as a student interested in teaching and teachers, think. No names are requested.

This Project is being paid for through a grant made by the United States Office of Education in Washington. It is being conducted by the Educational Research Council of America for the State of Ohio Department of Education.

If you have any questions, you may call me collect at Area Code 216: 696-8222. Thank you in advance for your participation.

Sincerely yours

A handwritten signature in cursive script, reading "Lawrence J. Marquit".

Lawrence J. Marquit
Research Associate

LJM/es
attachment

APPENDIX VI

STATE OF OHIO

DEPARTMENT OF EDUCATION



Part II. Teacher Education Assessment Survey



Teacher Education Assessment Project

Form S

The purpose of this instrument is to find out how you feel about certain aspects of secondary school teacher education in Ohio. It contains statements concerning three areas: pre-service, continuing education, and differentiated staffing and staff utilization. The statements were compiled after reviewing many books, research articles, and other published resources in these areas. Each statement is worded to express an attitude or belief regarding teacher education. We want to know whether you, as a student, agree or disagree with these statements.

Your responses to this instrument will be used for statistical purposes only. They will not be used to evaluate you, your institution, or its programs. While the major emphasis is on secondary teacher preparation, most of the statements could refer to all levels of teacher education.

The following terms are defined for purposes of this Survey:

- Pre-service program Synonymous with secondary teacher preparation program. Refers to any planned sequence of undergraduate study conducted in a degree-granting institution of higher education that was specifically designed to prepare qualified and certified teachers for Ohio's secondary schools.
- Continuing education program Synonymous with in-service education. Refers to any planned sequence of learning experiences made available to secondary teachers in the public schools for the purpose of improving their skills as teachers.
- Differentiated staffing and staff utilization Both refer to any organizational pattern of a public school staff designed to coordinate their special knowledges and skills for the purpose of improving the learning opportunities of children. For example, when professional teachers and assistants, such as teacher aides, work together in a classroom.

THIS INSTRUMENT IS ACCOMPANIED BY AN ANSWER BOOKLET. PLEASE SEE THE ANSWER BOOKLET FOR DIRECTIONS ON HOW TO RESPOND TO THIS SURVEY.

Part II
Teacher Education Assessment Survey (Form S)

You may keep this Survey Form. Please return only the answer booklet in the enclosed self-addressed, stamped envelope to:

Lawrence J. Marquit
Teacher Education Assessment Project
Educational Research Council of America
Rockefeller Building
Cleveland, Ohio 44113

We hope to receive all the completed answer sheets by February 28, 1970.
Your cooperation is appreciated.

LJM/es
1-70

432

TEACHER EDUCATION ASSESSMENT SURVEY

Please place your responses
in the enclosed answer booklet.

1. Gifted teachers should be allowed to exert a much greater influence on their students and colleagues than less gifted teachers.
2. Differentiated staffing could allow for the more effective use of teacher talent.
3. Different amounts of teaching responsibility should allow for salary differences.
4. Differentiated staffing can decrease the number of teachers who leave teaching.
5. Teacher education programs can be made more specific as differentiated staffing roles become better defined.
6. Differentiated staffing can create more jobs for the economically poor by allowing schools to hire community people to become teacher aides or paraprofessionals.
7. Differentiated staffing could help relieve the shortage of help in classrooms.
8. Differentiated staffing can serve as a valuable link between the schools and the community.
9. Differentiated staffing can provide children with more individualized instruction.
10. Differentiated staffing could allow for a more flexible schedule.
11. Differentiated staffing could improve intercultural contacts.
12. Differentiated staffing could provide additional male models for male students.
13. Differentiated staffing positions could provide for voluntary upward mobility for some paraprofessional personnel.
14. The training of paraprofessionals and teacher aides should be the joint responsibility of the schools, the universities, and the State Department of Education.

Teacher Education Assessment Survey

15. Differentiated staffing positions should be based on educational backgrounds and experience.
16. Differentiated staffing could allow the teacher more time for preparing lessons.
17. Different methods of recruiting and training are needed to provide for a differentiated instructional staff.
18. Differentiated staffing could allow teachers more opportunities to experiment and innovate.
19. Differentiated staffing could enable teachers to develop better courses and curriculums.
20. Differentiated staffing would be acceptable as long as everyone is directly responsible to the principal.
21. Differentiated staffing is just a way to pay teachers according to their ability rather than according to their experience and educational background.
22. Differentiated staffing is primarily a device for improving the learning opportunities of secondary school students.
23. Secondary teacher preparation should be in separate agencies of higher education, like medicine and law, and should have as a prerequisite, the Bachelor's degree.
24. Continuing education should be developed and paid for by the public school district.
25. Continuing education should be developed by the school district and paid for by the State of Ohio Department of Education.
26. Continuing education should be developed and paid for by the State of Ohio Department of Education.
27. Continuing teacher education should be a responsibility of both the public schools and the universities.
28. Continuing education is more important for teachers than pre-service education.
29. The development of continuing education programs is the responsibility of the public schools.
30. What happens in the secondary school classroom is the most significant outcome of continuing teacher education.

Teacher Education Assessment Survey

31. Teacher aides should be responsible to no more than five teachers.
32. All secondary teachers-in-training should follow the same preparation program sequence.
33. The teacher preparation program should be based on a written foundation of educational philosophy developed by students and faculty.
34. The teacher preparation program should be based on the current learning problems of secondary school students.
35. Teacher preparation institutions should plan to substantially reduce the number of professional education courses.
36. Professional education courses should have carefully defined behavioral objectives, that is, definite skills that students should have when they finish the courses.
37. The professional sequence should provide for individual differences in student ability.
38. Teacher preparation programs should be based on the concept that anyone who can complete the requirements for a Bachelor's degree can learn to be a teacher.
39. Ohio colleges should recruit students in teacher education primarily from Ohio.
40. The State of Ohio should make financial loans available for able and needy students who wish to become teachers.
41. Teacher preparation programs should strongly encourage all students to begin their training program at the same time.
42. Admission to a teacher preparation program should be based on a carefully planned screening procedure, i.e., highly selective.

Admission to a teacher preparation program should include the following criteria for students:

43. demonstrated ability to communicate effectively.
44. above average intelligence.
45. good physical health.
46. emotional stability and maturity.
47. record of high academic achievement in college.

Admission to a teacher preparation program should include the following criteria for students: (continued)

48. evidence of commitment to teaching.
49. demonstrated ability to work with children.
50. The academic progress of students enrolled in the teacher preparation program should be reviewed regularly.
51. The academic discipline, that is, the subject someone plans to teach, should be considered the most important ingredient in secondary teacher preparation.
52. The major difference between elementary and secondary teacher preparation is that the latter should have more emphasis in an academic discipline.
53. The secondary teacher preparation program should provide a broad background in the major academic discipline (subject area, e.g., biology) with a strong concentration in a minor discipline (e.g., botany).
54. High school teachers should be specialists in an academic discipline, not generalists.
55. Universities should have a placement service, or some other agency to help its graduates get a good teaching job.
56. The university should follow up on all, or nearly all, students after placement.
57. Teachers should be certified to teach in only one subject area, for example English; not English and French.
58. Universities should base their recommendation for certification on demonstrated performance rather than on the number of college credits a student has.
59. Placement services should be provided only for those students whom the university recommends for certification.
60. The universities should have a regular procedure for keeping the contents of their secondary teacher preparation program up-to-date.
61. Professional education courses should be provided only via clinical and first-hand laboratory experiences, that is, learning by doing.
62. The secondary teacher preparation program should move from text-book type learning to first-hand, or actual experiences.

Teacher Education Assessment Survey

63. Teacher training programs for secondary teachers should be set up mainly by teacher organizations, such as the Ohio Education Association, or the American Federation of Teachers.
64. The professional sequence for the training of secondary teachers should be set up mainly by the Ohio State Department of Education.
65. Teacher preparation programs are best left to the university's Department of Education.
66. Secondary teacher preparation programs should be mostly influenced by the liberal arts scholars.
67. Professors who share in the responsibility for preparing secondary teachers should be familiar with the everyday problems of public schools.
68. Professors who share in the responsibility for preparing secondary teachers should be familiar with the policies and procedures of the local schools.
69. Secondary teachers-in-training should be taught mostly via programmed learning, a form of instruction paced by the learner.
70. For the most part, secondary teachers-in-training should be taught by the entire university faculty according to how they would be expected to teach; i.e., according to the methods they are expected to use.
71. Secondary teacher preparation programs should stress an international rather than national perspective.
72. The Ohio State legislature should provide leadership for universities to coordinate public elementary and secondary education with higher education.
73. The secondary teacher preparation program should reflect the increasing variety of jobs a teacher must do.
74. The liberal arts or general education program should precede the professional training program.
75. The liberal arts program for secondary teachers-in-training should constitute the entire four year college program, with the professional sequence beginning after the Bachelor's degree.
76. The liberal arts or general education program for secondary teachers-in-training should constitute about half of the course work required for the Bachelor's degree.

Teacher Education Assessment Survey

77. The liberal arts program should provide college students with the basis for selecting the subject field they intend to teach.

The liberal arts program for high school teachers should include required course work in:

- 78. Behavioral sciences, e.g., general psychology
- 79. Natural sciences, e.g., zoology, physics, chemistry
- 80. Social sciences, e.g., history
- 81. Humanities, e.g., literature, fine arts, and philosophy
- 82. Mathematics
- 83. Foreign language
- 84. Practical arts and the world of work
- 85. Physical education
- 86. Communication skills

All secondary teachers-in-training should receive instruction in:

- 87. the principles of secondary education.
- 88. how to apply the principles of secondary education.
- 89. how to handle social events (extra-curricular activities, chaperoning).
- 90. how to develop educational policies.
- 91. educational leadership functions.
- 92. how to recruit others into the education profession.
- 93. how to organize a class for effective instruction.
- 94. the principles of educational finance.
- 95. how to use principles of educational finance.
- 96. the principles of adolescent psychology.
- 97. how to apply the principles of adolescent psychology in the classroom.

Teacher Education Assessment Survey

All secondary teachers-in-training should receive instruction in:
(continued)

98. contemporary issues in education.
99. how to use the resources of the State Education Department.
100. the organization and administration of American education.
101. how to help high school students adapt to their community.
102. how to use small and large group instruction effectively.
103. how to function as a member of a teaching team.
104. how to demonstrate respect for secondary school students.
105. how to prepare and use simulation materials.
106. how to use themselves as learning resources for secondary school students.
107. the principles of guidance and counseling.
108. how to apply the principles of guidance and counseling.
109. the principles of social psychology.
110. how to apply the principles of social psychology.
111. the principles of educational philosophy.
112. how to apply the principles of educational philosophy.
113. the principles of social philosophy.
114. how to apply the principles of social philosophy.
115. the principles of educational sociology.
116. how to apply the principles of educational sociology.
117. how to meet individual differences by providing meaningful individualized learning activities.
118. how to help youth build constructive value systems for themselves.

Teacher Education Assessment Survey

All secondary teachers-in-training should receive instruction in:
(continued)

119. urban sociology and psychology.
120. general educational psychology.
121. how to apply the principles of educational psychology.
122. the principles of human growth and development.
123. how to apply the principles of human growth and development.
124. using and applying educational research, including statistics.
125. the theories and applications of programmed learning.
126. how to provide learning activities in a non-graded school.
127. how to plan and teach in the framework of a modular or other type of flexible schedule plan.
128. the principles of secondary curriculum construction.
129. how to apply the principles of curriculum development.
130. how to evaluate and report student progress.
131. how to decide what is important to teach and what is not.
132. school-community relations.
133. how to apply educational theory in the classroom.
134. how to use community welfare and other similar agencies outside the school.
135. how to supervise student teachers (e.g., how to serve as a sponsor- or cooperating-teacher).
136. how to use instructional technology, such as educational television and computer-assisted instruction.
137. how to develop leadership skills in secondary school students.
138. how to develop a sense of creativity in secondary school students.

Teacher Education Assessment Survey

All secondary teachers-in-training should receive instruction in:
(continued)

139. how to manage a secondary school classroom.
140. theories of learning.
141. how to apply the theories of learning to what happens in the classroom.
142. how to be creative or how to use their own extant creative abilities in the classroom.
143. methods of teaching.
144. how to use, conceptualize, and synthesize knowledge.
145. the history of education.
146. teacher welfare and certification.
147. how to conduct a self-contained class.
148. how to help students become responsible community citizens.
149. how to establish a positive classroom climate.
150. how to make, select, and use learning materials and equipment.
151. how to use the resources of research agencies.
152. how to plan, participate in, and contribute to programs in continuing education.
153. how to keep up with new curricula and new methods.
154. how to develop self-directing, sequenced learning materials for independent study.
155. how to keep up with new developments in educational technology.
156. how to use instructional materials centers and similar resources.
157. how to use students as tutors (i.e., one student to give individual help to another student).

All secondary teachers-in-training should receive instruction in:
(continued)

158. how to conduct and/or participate in cooperative educational research projects.
 159. how to participate in an accreditation team such as the National Council for the Accreditation of Teacher Education, of the North Central Association of Colleges and Secondary Schools.
 160. how to apply the experiences gained through foreign and domestic travel in the classroom setting.
 161. how to identify their own professional strengths and weaknesses and translate them into behavioral objectives for the future.
 162. the duties and responsibilities of teacher aides and other paraprofessional personnel.
 163. Laboratory field experiences, such as observing and teaching a brief lesson in a public school, should be provided as a part of the professional preparation program.
 164. The Internship, a program of teacher training that usually requires about a year of regular school teaching before a certificate is given, should be a part of every professional preparation program.
- Admission to an internship program should depend on the following criteria:
165. student-teaching success, that is, successfully completed a program of supervised practice teaching under an experienced school teacher and guided by a college professor.
 166. faculty recommendations.
 167. scholastic rank.
 168. character.
 169. success in courses dealing with teaching methods.
 170. Interns should get paid.
 171. The internship should last more than one academic year.
 172. The internship should last less than one academic year.

Teacher Education Assessment Survey

173. Internships should be accompanied by concurrent course work.
174. Internships should be given after the Bachelor's degree.
175. Student-teaching should be followed by additional course work.
176. Feedback from student-teachers and cooperating-teachers should be regularly incorporated into teacher-training course revisions.
177. Student-teaching assignments, that is where someone is sent to do practice- or student-teaching, should allow for individual student differences.
178. Student-teachers should participate in group counselling sessions.
179. The period of student teaching should be long enough to allow for individual style to be developed.
180. The student-teaching experience should be long enough to allow the development of teacher-role assumption, not teacher-role playing.
181. Cooperating-teachers should be selected by school principals.
182. Cooperating-teachers should be selected by university faculty.
183. Student-teaching performance should be a criterion for keeping someone in the teacher training program.
184. Cooperating-teachers as well as student-teachers should be told beforehand what their duties and responsibilities will be.
185. Student team-teaching, that is, working with other teachers in preparing and presenting a lesson, should be a regular part of the student-teaching program.
186. Student-teachers should get experience in an urban setting.
187. The student-teaching program should provide opportunities for experience in all phases of teachers' work.
188. New forms of practical learning or laboratory experiences need to be developed in the universities; that is, new ways to teach teachers how to teach.
189. The amount of student laboratory experiences should increase gradually, beginning at the start of the program.
190. All teachers-in-training should participate in simulation exercises; that is, "real" experiences.

Teacher Education Assessment Survey

191. Teachers-in-training should have opportunities to work with secondary school students on an individual basis.
192. Teachers-in-training should participate in microteaching; that is, teach a short lesson to a very small group of high school students and get an immediate evaluation.
193. Laboratory experiences should be used to help teachers-in-training learn how to evaluate the effects of their teaching.
194. Universities should provide opportunities for microteaching as a team member.
195. Opportunities should be available for teachers-in-training to participate in awareness training.
196. School districts should earmark a regular percentage of their budget to research and continuing education.
197. School districts should provide their teachers with paid sabbatical leaves; that is, allow teachers a year of absence every seven years (at about half salary) to permit an opportunity for travel or further study.
198. Secondary school teachers should visit other schools and watch other teachers teach.
199. School districts should use holiday or vacation time, such as Christmas and Thanksgiving, for continuing education programs.
200. Teachers who participate in continuing education programs should be paid extra.
201. Teachers should participate in at least two weeks per year of continuing education.
202. Schools should use the State Education Department guidelines for continuing education programs.
203. Teachers ought to work together for improving what happens in the classroom.
204. School systems and colleges need to train paraprofessionals and teacher aides.

Teacher Education Assessment Survey

Training programs for auxiliary educational personnel, such as paraprofessionals and teacher aides should provide instruction in:

- 205. how to tutor secondary school students.
- 206. how to help secondary school students do independent study.
- 207. how to help secondary school students organize extra-curricular activities.
- 208. how to set up audiovisual equipment.
- 209. how to help teachers with students who have problems.
- 210. how to serve as laboratory assistants, e.g., chemistry.
- 211. how to help the teacher in reading and evaluating students.
- 212. how to help the teacher with instructional activities in art, music, and on field trips.
- 213. how to file educational materials.
- 214. how to operate duplicating equipment.
- 215. how to type.
- 216. how to record grades.
- 217. how to supervise cafeterias, hallways, and lavatories.
- 218. how to help in the library.
- 219. how to distribute instructional materials.
- 220. how to supervise clean-up activities.
- 221. how to communicate with secondary school students.
- 222. how to use other staff members' skills effectively.
- 223. Before teacher aides, paraprofessionals, and other auxiliary educational personnel are admitted to a training program, they must show evidence of a commitment to the field of education and to their own continued growth.

Teacher Education Assessment Survey

- 224. Preparation for paraprofessional personnel should be primarily first-hand rather than theoretical or second-hand.
- 225. Teachers and paraprofessionals should participate together in course work.
- 226. School districts should provide continuing education programs for substitute teachers.
- 227. Continuing education programs should stress the non-tutorial role of teachers; that is, those things not directly dealing with instruction.
- 228. College professors should conduct continuing education workshops in school districts during the regular school year.
- 229. Continuing education workshops should be conducted as demonstration models; that is, conducted in the way the teachers would be expected to teach.
- 230. School teachers and university professors should meet regularly to discuss professional problems.
- 231. Continuing education programs should be used by school administrators to identify prospective administrators and supervisors for their districts.
- 232. Continuing education programs should frequently stress academic subject matter content.

Thanks again for your cooperation.

APPENDIX VII



Teacher Education Assessment Survey Answer Booklet



DIRECTIONS

FORM S

Each item in the Survey is a statement about some aspect of teacher education. As you read each statement, think how you feel about it. If you

Strongly Agree then put an "X" in the appropriate space provided. If you

Agree then it means you tend to go along with the statement. If you have no feelings on the item, then put an "X" in the

Neutral column. With some items you may tend to

Disagree in which case you would "X" that column. Those items with which you

Strongly Disagree should be indicated with an "X" too.

You may keep your copy of the Survey, but please return this entire answer booklet with any comments you may have in the enclosed self-addressed, stamped envelope to:

Lawrence J. Marquit
Teacher Education Assessment Project
Educational Research Council of America
614 Rockefeller Building
Cleveland, Ohio 44113

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Item	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
1.					
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Item	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
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Item	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
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Teacher Education Assessment Survey—FORM S

Item	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
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Item	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
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Item	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
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Item	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
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Item	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
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Item	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
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Teacher Education Assessment Survey—FORM S

Item	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
192.					
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Item	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
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219.					
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221.					
222.					
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223.					
224.					
225.					
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227.					
228.					
229.					
230.					
231.					
232.					

Please indicate your grade or year:

Grade 11 _____ Grade 12 _____

Freshman _____

Sophomore _____

Junior _____

Senior _____

Graduate _____

College and Graduate students: please indicate your major subject area.

English _____

Foreign Language _____

Mathematics _____

Science _____

Social Science _____

Other _____

APPENDIX VIII



TEACHER EDUCATION ASSESSMENT PROJECT

ROCKEFELLER BUILDING · CLEVELAND, OHIO 44113 · TELEPHONE (216) 696-8222



Winter, 1970

Dear Colleague:

You were selected from among many other professional educators to participate in a research project on teacher education in Ohio. We would appreciate it if you will respond to the enclosed survey. Your response will provide valuable input towards the improvement of teacher education in our state. The directions for this survey are attached to it.

This instrument cannot and will not be used to evaluate you, your school or anyone connected with it. The results will be used for statistical purposes only. No names are requested.

This Project is funded by an ESEA Title III grant. It is being conducted by the Educational Research Council of America for the State of Ohio Department of Education. If you have any questions, you may call me collect at Area Code 216: 696-8222. Thank you in advance for your participation.

Sincerely yours,

Lawrence J. Marquit
Research AssociateLJM/es
attachment



APPENDIX IX
STATE OF OHIO
DEPARTMENT OF EDUCATION

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Part II. Teacher Education Assessment Survey

Teacher Education Assessment Project

Form TA

The purpose of this instrument is to find out what is currently happening in secondary school teacher education in Ohio. It is divided into two Sections. Both Sections contain statements concerning three areas: pre-service, continuing education, and differentiated staffing and staff utilization. The statements were compiled after reviewing many books, research articles, and other published resources in these areas. Section 1 consists of statements which express a certain point of view. Section 2 consists of statements worded to describe what may be an existing condition, attitude, or belief regarding teacher education at your institution.

Your responses to this instrument will be used for statistical purposes only. They will not be used to evaluate you, your institution, or its programs. While the major emphasis is on secondary teacher preparation, most of the statements could refer to all levels of teacher education.

The following terms are defined for purposes of this Survey:

- Pre-service program Synonymous with secondary teacher preparation program. Refers to any planned sequence of undergraduate study conducted in a degree-granting institution of higher education that was specifically designed to prepare qualified and certified teachers for Ohio's secondary schools.
- Continuing education program Synonymous with in-service education. Refers to any planned sequence of learning experiences made available to secondary teachers in the public schools for the purpose of improving their skills as teachers.
- Differentiated staffing and staff utilization Both refer to any organizational pattern of a public school staff designed to coordinate their special knowledges and skills for the purpose of improving the learning opportunities of children. For example, when professional teachers and assistants, such as teacher aides, work together in a classroom.

THIS INSTRUMENT IS ACCOMPANIED BY AN ANSWER
BOOKLET. PLEASE SEE THE ANSWER BOOKLET FOR
DIRECTIONS ON HOW TO RESPOND TO THIS SURVEY.

Part II
Teacher Education Assessment Survey (Form TA)

You may keep this Survey Form. Please return only the answer booklet in the enclosed self-addressed, stamped envelope to:

Lawrence J. Marquit
Teacher Education Assessment Project
Educational Research Council of America
Rockefeller Building
Cleveland, Ohio 44113

We hope to receive all the completed answer sheets by February 28, 1970.
Your cooperation is appreciated.

LJM/es
1-70

TEACHER EDUCATION ASSESSMENT SURVEY**Section 1**

Please place your responses
in the enclosed answer booklet.

-
1. Gifted teachers should be allowed to exert a much greater influence on their students and colleagues than less gifted teachers.
 2. Differentiated staffing could allow for the more effective use of teacher talent.
 3. Different amounts of teaching responsibility should allow for salary differentials.
 4. Differentiated staffing can reduce teacher dropout.
 5. Teacher education programs can be made more specific as differentiated staffing roles become better defined.
 6. Differentiated staffing can create more jobs for the economically poor.
 7. Differentiated staffing could help relieve the manpower shortage in classrooms.
 8. Differentiated staffing can serve as a valuable link between the schools and the community.
 9. Differentiated staffing can provide children with more individualized instruction.
 10. Differentiated staffing could allow for a more flexible schedule.
 11. Differentiated staffing could improve intercultural contacts.
 12. Differentiated staffing could provide additional male models for male students.
 13. Differentiated staffing positions could provide for voluntary upward mobility for some paraprofessional personnel.
 14. The training of paraprofessionals and teacher aides should be the joint responsibility of the schools, the universities, and the State Department of Education.
 15. Differentiated staffing hierarchies should be based on educational backgrounds and experience.

Teacher Education Assessment Survey

16. Differentiated staffing allows the teacher more time for lesson preparation.
17. Different modes of recruitment and training are needed to provide for a differentiated instructional staff.
18. Differentiated staffing allows teachers greater flexibility to experiment and innovate.
19. Differentiated staffing enables teachers to better create and structure curriculum.
20. Differentiated staffing is acceptable as long as it is established on a horizontal rather than hierarchical scale.
21. Differentiated staffing is primarily a device for implementing merit pay.
22. Differentiated staffing is primarily a device for improving the learning opportunities of children.
23. Secondary teacher preparation should be in separate agencies of higher education, like medicine and law, and should have as a prerequisite, the Bachelor's degree.
24. Continuing education should be developed and financed by the school district.
25. Continuing education should be developed by the school district and financed by the State of Ohio Department of Education.
26. Continuing education should be developed and financed by the State of Ohio Department of Education.
27. Continuing teacher education should be a joint school-university responsibility.
28. Continuing education is more important for teachers than pre-service education.
29. The development of continuing education programs is the responsibility of the public schools.
30. What happens in the secondary school classroom is the most significant outcome of continuing teacher education.
31. Teacher aides should be responsible to no more than five teachers.

Teacher Education Assessment Survey

32. Secondary teachers-in-training should follow the same preparation program sequence.
33. Teacher preparation programs should be based on an explicit foundation of educational philosophy developed by students and faculty.
34. Teacher preparation programs should be based on the current learning problems of children.
35. Teacher preparation institutions should begin plans to substantially reduce the number of courses in their professional sequence.
36. All professional courses should have carefully defined behavioral objectives.
37. The professional sequence should provide for individual differences in student ability.
38. Teacher preparation programs should be based on the concept that anyone who can complete the requirements for a Bachelor's degree can learn to be a teacher.
39. Ohio college recruitment programs for teachers should be aimed primarily at Ohio.
40. The State of Ohio should make financial loans available for able and needy students who wish to become teachers.
41. Teacher preparation programs should strongly encourage a common entry point for all students.
42. Admission to a teacher preparation program should be based on a carefully planned screening procedure, i.e., highly selective.

Admission to the teacher preparation program should include the following criteria:

43. demonstrated ability to communicate effectively.
44. above average intelligence.
45. good physical health.
46. emotional stability and maturity.
47. record of high academic achievement in college.
48. evidence of commitment to teaching.
49. demonstrated ability to work with children.

Teacher Education Assessment Survey

50. The academic progress of students enrolled in a teacher preparation program should be reviewed regularly.
51. The academic discipline should be considered the most important ingredient in secondary teacher preparation.
52. The major difference between elementary and secondary teacher preparation should be that the latter would have more emphasis in an academic discipline.
53. The secondary teacher preparation program should provide a broad background in the major academic discipline (subject area, e.g., biology) with a strong concentration in a minor discipline (e.g., botany).
54. The preparation program should operate on the belief that secondary school teachers should be specialists in an academic discipline, not generalists.
55. Teacher preparation institutions should have a placement service.
56. Teacher preparation institutions should follow up on all, or nearly all, students after placement.
57. Certification should be recommended in only one subject area for any one student (e.g., English; not English and a foreign language).
58. Recommendation for certification should be based on demonstrated performance rather than on accumulated college credits.
59. Placement services should be provided only for those students whom the institution recommends for certification.
60. Institutions should have a regular procedure for keeping the contents of their secondary teacher preparation program up-to-date.
61. Professional education courses should be provided only via clinical and first-hand laboratory experiences.
62. The secondary teacher preparation program should move from vicarious to first-hand experiences.
63. The professional sequence for the training of secondary teachers should be set mainly by teacher organizations, such as the OEA or AFT.
64. The professional sequence for the training of secondary teachers should be set mainly by the Ohio State Department of Education.

Teacher Education Assessment Survey

65. Planning and implementing teacher preparation should be the exclusive responsibility of the university's Department of Education.
66. Secondary teacher preparation programs should be mostly influenced by the liberal arts scholars.
67. Professors who share in the responsibility for preparing secondary teachers should be familiar with the everyday problems of the public school.
68. Professors who share in the responsibility for preparing secondary teachers should be familiar with local school policies and procedures.
69. Secondary teachers-in-training should be taught mostly via programmed learning.
70. For the most part, secondary teachers-in-training should be taught by the entire university faculty according to how they are expected to teach; i.e., according to the methods they are expected to use.
71. The secondary teacher preparation program should stress an international rather than national perspective.
72. The Ohio State legislature should provide leadership for our school to coordinate public elementary and secondary education with higher education.
73. Secondary teacher preparation programs should demonstrate an awareness of the increasing multiplicity of teachers' roles.
74. The liberal arts or general education program should precede the professional sequence.
75. The liberal arts program for secondary teachers-in-training should constitute the entire four years, with the professional sequence beginning after the Baccalaureate.
76. The liberal arts or general education program for secondary teachers-in-training should usually constitute about half of the course work required for the Bachelor's degree.
77. The liberal arts program should provide students with the basis for selecting the subject field they intend to teach.

The liberal arts program for secondary teachers-in-training should include required course work in:

78. Behavioral sciences, e.g., general psychology

Teacher Education Assessment Survey

The liberal arts program for secondary teachers-in-training should include required course work in: (continued)

- 79. Natural sciences, e.g., zoology, physics, chemistry
- 80. Social sciences, e.g., sociology
- 81. Humanities, e.g., literature, fine arts, and philosophy
- 82. Mathematics
- 83. Foreign language
- 84. Practical arts and the world of work
- 85. Physical education
- 86. Communication skills

All secondary teachers-in-training should receive instruction in:

- 87. the principles of secondary education.
- 88. how to apply the principles of secondary education.
- 89. how to handle social events (extra-curricular activities, chaperoning).
- 90. how to develop educational policies.
- 91. educational leadership functions.
- 92. how to recruit others into the education profession.
- 93. how to organize a class for effective instruction.
- 94. the principles of educational finance.
- 95. how to use principles of educational finance.
- 96. the principles of adolescent psychology.
- 97. how to apply the principles of adolescent psychology in the classroom.
- 98. contemporary issues in education.
- 99. how to use the resources of the State Education Department.

Teacher Education Assessment Survey

All secondary teachers-in-training should receive instruction in:
(continued)

100. the organization and administration of American education.
101. how to help high school students adapt to their community.
102. how to use small and large group instruction effectively.
103. how to function as a member of a teaching team.
104. how to demonstrate respect for secondary school students.
105. how to prepare and use simulation materials.
106. how to use themselves as learning resources for secondary school students.
107. the principles of guidance and counseling.
108. how to apply the principles of guidance and counseling.
109. the principles of social psychology.
110. how to apply the principles of social psychology.
111. the principles of educational philosophy.
112. how to apply the principles of educational philosophy.
113. the principles of social philosophy.
114. how to apply the principles of social philosophy.
115. the principles of educational sociology.
116. how to apply the principles of educational sociology.
117. how to meet individual differences by providing meaningful individualized learning activities.
118. how to help youth build constructive value systems for themselves.
119. urban sociology and psychology.
120. general educational psychology.

Teacher Education Assessment Survey

All secondary teachers-in-training should receive instruction in:
(continued)

121. how to apply the principles of educational psychology.
122. the principles of human growth and development.
123. how to apply the principles of human growth and development.
124. using and applying educational research, including statistics.
125. the theories and applications of programmed learning.
126. how to provide learning activities in a non-graded school.
127. how to plan and teach in the framework of a modular or other type of flexible schedule plan.
128. the principles of secondary curriculum construction.
129. how to apply the principles of curriculum development.
130. how to evaluate and report student progress.
131. how to decide what is important to teach and what is not.
132. school-community relations.
133. how to apply educational theory in the classroom.
134. how to use community welfare and other similar agencies outside the school.
135. how to supervise student teachers (e.g., how to serve as a sponsor- or cooperating-teacher).
136. how to use instructional technology, such as educational television and computer-assisted instruction.
137. how to develop leadership skills in secondary school students.
138. how to develop a sense of creativity in secondary school students.
139. how to manage a secondary school classroom.
140. theories of learning.

Teacher Education Assessment Survey

All secondary teachers-in-training should receive instruction in:
(continued)

141. how to apply the theories of learning to what happens in the classroom.
142. how to be creative or how to use their own extant creative abilities in the classroom.
143. methods of teaching.
144. how to use, conceptualize, and synthesize knowledge.
145. the history of education.
146. teacher welfare and certification.
147. how to conduct a self-contained class.
148. how to help students become responsible community citizens.
149. how to establish a positive classroom climate.
150. how to make, select, and use learning materials and equipment.
151. how to use the resources of research agencies.
152. how to plan, participate in, and contribute to programs in continuing education.
153. how to keep up with new curricula and new methods.
154. how to develop self-directing, sequenced learning materials for independent study.
155. how to keep up with new developments in educational technology.
156. how to use instructional materials centers and similar resources.
157. how to use students as tutors (i. e. , one student to give individual help to another student).
158. how to conduct and/or participate in cooperative educational research projects.

Teacher Education Assessment Survey

All secondary teachers-in-training should receive instruction in:
(continued)

- 159. how to participate in an accreditation team such as the National Council for the Accreditation of Teacher Education, or the North Central Association of Colleges and Secondary Schools.
- 160. how to apply the experiences gained through foreign and domestic travel in the classroom setting.
- 161. how to identify their own professional strengths and weaknesses and translate them into behavioral objectives for the future.
- 162. the duties and responsibilities of teacher aides and other paraprofessional personnel.
- 163. Laboratory field experiences, such as observing and teaching a brief lesson in a public school, should be provided as a part of the professional preparation program.
- 164. The Internship should be a part of the professional preparation program.

Admission to an internship program should depend on the following criteria:

- 165. student teaching success.
- 166. faculty recommendations.
- 167. scholastic rank.
- 168. character.
- 169. success in methods courses.
- 170. Interns should receive a stipend.
- 171. The internship should last more than one academic year.
- 172. The internship should last less than one academic year.
- 173. The interns'ip should be accompanied by concurrent course work.
- 174. The internship should be at the post-Baccalaureate level.
- 175. Student-teaching should be followed by additional course work.
- 176. Feedback from student-teachers and cooperating-teachers should be regularly incorporated into professional course revisions.

Teacher Education Assessment Survey

177. Student-teaching assignments should allow for individual differences.
178. Student-teachers should participate in group counselling sessions.
179. The period of student teaching should be long enough to allow for individual style to be developed.
180. The student-teaching experience should encourage the development of teacher-role assumption, not teacher-role playing.
181. Cooperating-teachers should be selected by the school principal.
182. Cooperating-teachers should be selected by the university.
183. Student-teaching performance should be a retention criteria for continuation in the professional sequence.
184. Cooperating-teachers as well as student-teachers should be given an orientation to the university's student teaching program.
185. Student team-teaching should be a regular part of the student-teaching program.
186. Student-teachers should get experience in an urban setting.
187. The student-teaching program should provide opportunities for experience in all phases of teachers' work.
188. New forms of laboratory experiences need to be developed at the teacher preparation institutions.
189. The amount of student laboratory experiences should increase gradually, beginning at the start of the professional program.
190. Teachers-in-training should participate in simulation exercises.
191. Teachers-in-training should have opportunities to work with secondary school students on an individual tutorial basis.
192. Teachers-in-training should participate in microteaching.
193. Laboratory experiences should be used to help teachers-in-training learn how to evaluate the effects of teaching.
194. The institution should provide opportunities for microteaching as a team member.

Teacher Education Assessment Survey

195. Opportunities should be available for teachers-in-training to participate in sensitivity training.

SECTION 2

196. Our school district earmarks a regular percentage of its budget to research and continuing education.
197. Our school district provides its teachers with paid sabbatical leaves.
198. Teachers in our district are encouraged to participate in intervisitations.
199. Our school district utilizes holiday or vacation time, such as Christmas and Thanksgiving, for continuing education programs.
200. Our school district provides salary increments for teachers who participate in continuing education programs.
201. Teachers in our district usually participate in at least two weeks per year of continuing education.
202. We use the State Education Department guidelines for continuing education programs.
203. Our teachers work together for improving what happens in the classroom.
204. Our school district provides training for paraprofessionals and teacher aides.

Our training program(s) for auxiliary educational personnel, such as paraprofessionals and teacher aides, provides instruction in:

205. how to tutor secondary school students.
206. how to help secondary school students do independent study.
207. how to help secondary school students organize extra-curricular activities.
208. how to set up audiovisual equipment.
209. how to help teachers with emotionally upset students.
210. how to serve as laboratory assistants, e.g., chemistry.
211. how to help the teacher in reading and evaluating students.

Teacher Education Assessment Survey

Our training program(s) for auxiliary educational personnel, such as para-professionals and teacher aides, provides instruction in: (continued)

- 212. how to help the teacher with instructional activities in art, music, and on field trips.
- 213. how to file educational materials.
- 214. how to operate duplicating equipment.
- 215. how to type.
- 216. how to record grades.
- 217. how to supervise cafeterias, hallways, and lavatories.
- 218. how to help in the library.
- 219. how to distribute instructional materials.
- 220. how to supervise clean-up activities.
- 221. how to communicate with secondary school students.
- 222. how to use other staff members' skills effectively.
- 223. Before teacher aides, paraprofessionals, and other auxiliary educational personnel are admitted to our training program, they must show evidence of a commitment to the field of education and to their own continued growth.
- 224. Preparation for our paraprofessional personnel is primarily first-hand rather than theoretical or vicarious.
- 225. We provide opportunities for teachers and paraprofessionals to participate together in the training program.
- 226. Our school district provides continuing education programs for substitute teachers.
- 227. We provide continuing education programs which stress the non-tutorial role of teachers.
- 228. College professors usually conduct our continuing education workshops during the regular school year.
- 229. Our continuing education workshops are conducted as demonstration models.

Teacher Education Assessment Survey

- 230. Our teachers participate in an on-gong program where school and university personnel can meet to discuss professional problems.
- 231. Our continuing education programs are used by school administrators to identify prospective administrators and supervisors for our district.
- 232. Our continuing education programs frequently stress academic subject matter content.

Thanks again for your cooperation.



APPENDIX X

Teacher Education Assessment Survey Answer Booklet
DIRECTIONS



FORM TA

Section 1. As you read each item in this Section, please indicate the extent of your agreement with each statement by placing an "x" in the appropriate cell on the answer sheet.

If you wish to qualify any item in this or later Sections, please use the back of the answer sheet and indicate the item number.

Some of the items provide an opportunity for you to indicate when you feel certain things should occur. For example, item 98, states—

All secondary teachers in training should receive instruction in contemporary issues in education.

If you agree at all with the statement, do you have any preference when such instruction should be given? If you feel it should be given during the junior year, then place an "X" in that column. If you feel it should be given as a part of a continuing education or in-service program, then put an "X" in that column. You may put an "X" in more than one column if you like.

Section 2. This Section has two response categories.

Indicate in Category I whether or not the statement describes an existing condition in your school district.

Indicate in Category II whether or not you feel the statement should describe an existing condition in your school district.

You may keep your copy of the Survey, but please return this entire answer booklet with your comments in the enclosed self-addressed, stamped envelope to:

Lawrence J. Marquit
Teacher Education Assessment Project
Educational Research Council of America
Rockefeller Building
Cleveland, Ohio 44113

Teacher Education Assessment Survey--FORM TA

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Section 1

Item	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
1.					
2.					
3.					
4.					
5.					
6.					
7.					
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12.					
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22.					

Item	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
23.					
24.					
25.					
26.					
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28.					
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31.					
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41.					
42.					
43.					

Item	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
44.					
45.					
46.					
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62.					
63.					
64.					

Section 1

Item	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
78.					
79.					
80.					
81.					
82.					
83.					
84.					
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86.					
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98.					
99.					

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Teacher Education Assessment Survey—FORM TA

457

Section 1

Item	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree	When should such instruction be given?				
						Undergraduate Years				Continuing Education
						1	2	3	4	
100.										
101.										
102.										
103.										
104.										
105.										
106.										
107.										
108.										
109.										
110.										
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114.										
115.										
116.										
117.										
118.										
119.										
120.										
121.										

Teacher Education Assessment Survey—FORM TA

Section 1

Item	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree	When should such instruction be given?				
						Undergraduate Years				Continuing Education
						1	2	3	4	
122.										
123.										
124.										
125.										
126.										
127.										
128.										
129.										
130.										
131.										
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140.										
141.										
142.										
143.										

Teacher Education Assessment Survey—FORM TA
Section 1

459

Item	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree	When should such instruction be given?				
						Undergraduate Years				Con- tinuing Educa- tion
						1	2	3	4	
144.										
145.										
146.										
147.										
148.										
149.										
150.										
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162.										
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163.										
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Teacher Education Assessment Survey—FORM TA

Section 1

Item	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
164.					
●					
165.					
166.					
167.					
168.					
169.					
●					
170.					
171.					
172.					
173.					
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181.					
182.					
183.					

[illegible][illegible]

Teacher Education Assessment Survey—FORM TA

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Section 2

CATEGORY I Does the described condition exist?				CATEGORY II Should the described condition exist?			CATEGORY I Does the described condition exist?				CATEGORY II Should the described condition exist?		
Item	Yes	No	I don't know	Yes	No	I don't know	Item	Yes	No	I don't know	Yes	No	I don't know
196.							228.						
197.							229.						
198.							230.						
199.							231.						
200.							232.						
201.													
202.													
203.													
204.													
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217.													
218.													
219.													
220.													
221.													
222.													
223.													
224.													
225.													
226.													
227.													

Present position:

_____ Teacher

_____ Principal or Assistant

_____ Central Office Administrator

_____ Other

If you are a teacher, please indicate your subject area:

English _____ Social Science _____ Science _____

Mathematics _____ Foreign Language _____ Other _____

Please indicate if you are on:

tenure _____ not on tenure _____

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